

Landscape and Visual Impact Assessment.

Land off Royal Hill Road, Spondon, Derby

On behalf of Miller Homes.

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1. Introduction.

Terms of Reference

- 1.1. Pegasus Group has been instructed by Miller Homes (the applicant) to undertake a Landscape and Visual Impact Assessment (LVIA) in relation to the proposed development of land off Royal Hill Road, Spondon (hereafter referred to as the 'Site').
- 1.2. The report appraises the potential landscape and visual effects related to an outline application for residential development on this Site (referred to as the 'proposed development').
- 1.3. This LVIA will consider existing landscape and visual receptors in the study area. These include:
 - Physical landscape resources;
 - Landscape character; and
 - Views and visual amenity experienced by residents, recreational users (including visitors / tourists) and road users.
- 1.4. Landscape character assessment is the systematic description and analysis of the landscape resource, including physical features and elements of the landscape, of how their composition forms distinct areas of character, appraisal of quality and sensitivity, and the potential effect of the proposed development on the landscape. These elements include topography and landform, vegetation pattern, land use, hydrology, development and transport patterns and public access.
- 1.5. Visual assessment is the description and analysis of the views experienced by receptors from residential properties, public buildings, public open spaces, public rights of way, open access areas, transport corridors and places of work, and the potential effect of the proposed development on these receptors.
- 1.6. The LVIA aims to identify and describe the effects that are likely to occur including whether they are adverse or beneficial. It aims to assess the likely significance of the effects identified; and it includes proposals for measures designed to avoid, prevent or reduce any significant adverse effects.
- 1.7. Principles and good practice for undertaking landscape and visual impact assessment are set out in the 'Guidelines for Landscape and Visual Impact Assessment', Third Edition (2013)¹, published by the Landscape Institute (LI) and the Institute of Environmental Management and Assessment (IEMA).
- 1.8. The detailed methodology used for this LVIA is included in **Appendix A**.

¹ Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment 3rd Edition (April, 2013)

Site Context and Overview

- 1.9. The Site consists of 4.51 hectares (Ha) of land situated adjoining the western edge of Spondon, a suburb of Derby just over 3km from the city centre in the east of Derbyshire. Approximately 15km to the east is the city of Nottingham.
- 1.10. It occupies four rectilinear agricultural fields that are currently grazed. To the east of the Site is the wider settlement of Spondon, the urban / rural western edge of which continues to the south. Boundaries are defined by hedgerows (or gappy hedgerow sections) or post and rail fencing, with scattered hedgerow trees. Some fields are subdivided into paddocks by fences.
- 1.11. The surrounding landscape context of the Site is influenced by the transition between the settled edge of Spondon and Derby city, and the wider landscape primarily to the north. To the west is a wide tract of mixed agricultural land and a vegetated nature reserve between Spondon and the wider urban area of Derby. To the north is further agricultural land surrounding Derby.
- 1.12. The proposed development comprises an outline application, with all matters reserved except for access, for the development of up to 90 residential dwellings, with associated internal vehicular routes and pedestrian links, open space, and a scheme of strategic landscaping / green infrastructure including an area of community orchard. A single vehicular access is to be taken off Royal Hill Road towards the southern end of the eastern boundary of the Site.
- 1.13. The Illustrative Masterplan is included at Appendix B.
- 1.14. Additional information and a more detailed description of the physical components, landscape character and visual amenity of the Site and study area are set out in later sections of this LVIA.

2. Approach and Methodology

Overview

- 2.1. The approach and methodology used for this report has been developed using best practice guidance, as set out in the following documents:
- Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition;
 - Natural England (2014) An Approach to Landscape Character Assessment; and
 - Landscape Institute Technical Guidance Note 06/19, Visual Representation of Development Proposals; and
 - Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations.
- 2.2. Use has also been made of additional sources of data and information, such as published character assessments, aerial imagery (Google Earth), and Ordnance Survey (OS) base mapping. These are referenced in the relevant sections of the baseline information. Supporting plans have also been produced as part of this LVIA and are included as Figures 1 to 7.

Level of Assessment

- 2.3. Principles and good practice for undertaking landscape and visual impact assessment are set out in the Landscape Institute (LI) and the Institute of Environmental Management (IEMA) Guidelines for Landscape and Visual Impact Assessment, Third Edition (2013)² (GLVIA3).
- 2.4. The GLVIA3 acknowledges that landscape and visual impact assessment (LVIA) can be carried out either as a standalone assessment or as part of a broader EIA. GLVIA3 notes that the overall principles and core steps in the process are the same but that there are specific procedures in EIA with which an LVIA that sits within an EIA must comply.
- 2.5. This assessment addresses matters of individual resources, character areas and representative viewpoints. The LVIA also considers the interaction between landscape character and views in relation to physical components of the landscape. The LVIA draws on professional judgement in relation to sensitivity of receptors (both landscape and visual), the nature of impacts and consequential likely effects. This process informs judgements on a landscape mitigation strategy which will avoid, reduce, or remedy adverse impacts.
- 2.6. Landscape features and elements provide the physical environment for flora and fauna and the associated importance of biodiversity assets. This LVIA does not consider the value, susceptibility or importance on ecology and biodiversity, nor does it consider impacts from an ecological stance.

2. Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment 3rd Edition (April, 2013)

Scope of the Assessment

- 2.7. The spatial scope (or study area) for the LVIA is initially determined by reference to the area of landscape that may be affected and from which the proposed development may be visible. Preliminary study area extents were refined following on-site survey work and examination of Zone of Theoretical Visibility (ZTV) mapping produced from the proposed development and are described at paragraph 3.84. That is not to say that the proposed development may have some influence on landscape character or visual amenity beyond this distance, but any effects are judged to be minimal, if and where evident.
- 2.8. This LVIA considers landscape and visual effects in the short term; at completion; but also in the longer term after fifteen years when mitigation measures (such as planting) will have matured and are likely to perform the intended function (e.g., screening or enhancement of landscape features or structure).
- 2.9. Landscape features and elements provide the physical environment for biodiversity assets, however this LVIA does not consider the value, susceptibility or importance on ecology and biodiversity, nor does it consider impacts from an ecological stance.
- 2.10. Heritage assets such as Scheduled Monuments, Listed Buildings and Conservation Areas all contribute to the overall present-day landscape character, context and setting of an area. These aspects have been given consideration in the LVIA in terms of physical landscape resources (for example trees and hedgerows) and landscape character. However, this LVIA does not address the historic significance, importance or potential impacts on heritage assets and designations; these assets are assessed in the context of landscape and visual matters only.

Collating Baseline Information

- 2.11. To capture a comprehensive description of the baseline position for landscape and visual receptors, information has been collated using a process of desk study and field survey work.
- 2.12. The desk study includes reference to published landscape character studies and other published policy documents relevant to landscape and visual matters, such as OS 1:25,000 base mapping and aerial imagery.
- 2.13. Field survey work was completed during July 2023. A series of representative photographs were taken with a full-frame digital SLR camera with a 50mm fixed focal length lens, set at approximately 1.6 metres Above Ground Level (AGL). These are presented as a series of viewpoints and have been used to inform both the landscape and, separately, visual appraisal work (included as Figure 6, Viewpoint Photographs 1 to 10).
- 2.14. The field survey and viewpoint photography were undertaken during the summer season when deciduous vegetation was in full leaf and thus provides the greatest levels of screening.
- 2.15. While the viewpoint photography therefore does not illustrate a 'worst-case scenario' due to current vegetative screening, the visual analysis acknowledges likely impacts during summer but will also seek to present an assessment of predicted greatest potential levels of effects; assumptions are stated on this basis where these are made.

Consideration of Effects

- 2.16. Having established the relevant baseline position, the LVIA process then considers landscape receptors and visual receptors, specifically in response to the nature of the proposed development, assesses their sensitivity specifically in response to the nature of the proposed development, identifies the nature and magnitude of potential impacts, and consequently the likely scale of effect that would arise from the proposed development on the identified landscape and visual receptors.
- 2.17. For both landscape effects and visual effects, the final conclusions on significance are based on professional judgements combining the specific analysis of the sensitivity of receptors and predictions on the magnitude of change (or impact). GLVIA3 advocates a balanced justification of these issues using professional judgement rather than formulaic matrices.
- 2.18. The detailed methodology is provided at **Appendix A**.

3. Landscape and Visual Baseline

- 3.1. The following section describes the individual components of the physical landscape that are present in the study area. These have been described to establish an understanding of the specific landscape baseline, including individual elements and more distinctive features, which together contribute to landscape character.

Landscape Planning Framework

- 3.2. In the context of the relevant planning framework, the following section sets out a summary of those policies relevant to landscape and visual matters. In respect of the proposals, the relevant policies will also have potential implications for the landscape mitigation strategy.

European Landscape Framework

- 3.3. The European Landscape Convention (ELC) promotes the protection, management and planning of European landscapes. The ELC was adopted on 20 October 2000 and came into force on 1 March 2004. It defines landscape as:

“...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors).”

- 3.4. This definition is important in that it focuses on landscape as a resource in its own right and moves beyond the idea that landscapes are only a matter of aesthetics and visual amenity.

National Planning Policy Framework

- 3.5. The revised National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government (MHCLG) in July 2021, setting out the Government’s planning policies for England and providing a framework within which the appropriate local council can produce local and neighbourhood plans; the NPPF is a material consideration in planning decisions³.
- 3.6. The NPPF sets out three dimensions to achieving sustainable development that include economic, social and environmental considerations. It places an onus on the planning system to perform a role in relation to the environment that ‘contributes to the protection and enhancement of our natural, built and historic environment...’ going on to note that sustainable solutions should take account of local circumstances and reflect the character of each area. This underpins the strategic guidance set out in the NPPF in relation to landscape and visual matters.
- 3.7. In relation to landscape and visual matters, achieving well-designed places (Section 12) aims to ensure that developments are ‘visually attractive’, are sympathetic to local character (including the surrounding built environment and landscape setting) and to establish and maintain a strong sense of place⁴.

3 Para 2, MHCLG, NPPF (July 2021)

4 Para 126, MHCLG, NPPF (July 2021)

- 3.8. Section 12 also makes specific reference to the use of tree planting, which it states, "make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change⁵."
- 3.9. Section 15 of the NPPF addresses on 'conserving and enhancing the natural environment' stating that policies and decisions should contribute to this by 'protecting and enhancing valued landscapes (noting that this should be commensurate with a statutory status or identified quality identified in a development plan) and also recognising the 'intrinsic character and beauty of the countryside'⁶.
- 3.10. NPPF notes the importance that designs 'evolve' in response to local issues and to the views of the community⁷.

Planning Practice Guidance

- 3.11. The Planning Practice Guidance (PPG) is a web-based resource prepared by the Department for Communities and Local Government (DCLG). The PPG sets out guidance across various topics and effectively supersedes previous guidance on many aspects of planning; topics are updated as required.
- 3.12. The PPG for the 'Natural Environment' was updated in July 2019 and addresses agricultural land, green infrastructure, biodiversity and landscape.
- 3.13. In relation to green infrastructure (GI) the PPG acknowledges how a 'range of spaces and assets' can provide 'environmental and wider benefits'. The PPG states that GI can include:

"...parks, playing fields, other areas of open space, woodland, allotments, private gardens, sustainable drainage features, green roofs and walls, street trees and 'blue infrastructure' such as streams, ponds, canals and other water bodies."
- 3.14. The PPG goes on to recognise how GI can help achieve well designed spaces, and conservation and enhancement of the natural environment. The PPG also recognises the benefit of considering GI 'at the earliest stage of development proposals, as an integral part of development and infrastructure provision, and taking into account existing natural assets'.
- 3.15. In relation to landscape, the PPG reiterates the requirements of the NPPF in terms of 'recognising the intrinsic character and beauty of the countryside'. The PPG states that:

"Where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence. Policies may set out criteria against which proposals for development affecting these areas will be assessed. Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures, such appropriate design principles and visual screening, where necessary."

5 Para 131, MHCLG, NPPF (July 2021)

6 Section 15 and para 174, MHCLG, NPPF (July 2021)

7 Para 129, MHCLG, NPPF (July 2021)

- 3.16. The PPG also notes the relevance of landscape character assessment, landscape sensitivity/capacity assessment and landscape and visual impact assessment. However, whilst recognising these different aspects of landscape analysis, the PPG does not reflect the subtle variations in these and potential overlap between their different uses and requirements.
- 3.17. This LVIA includes reference to published landscape character assessments which have been prepared at a range of scales and detail. Reference has also been made to the local landscape character by reference to the key characteristics of the Site and its immediate context, including existing, enhanced and potentially new green infrastructure. Therefore, this LVIA responds fully to the requirement of the PPG.

Local Planning Policy and Guidance

- 3.18. The following section sets out the local planning policy background relevant to the Site.
- 3.19. The Site is located within the administrative area of Derby City (DCC). The adopted development plan currently comprises the 'Derby City Local Plan Part 1 – Core Strategy' (adopted January 2017), which sets out the planning context for the area up to 2028, together with a number of policies 'saved' from the City of Derby Local Plan Review (2006) which remain relevant. Those policies relevant to landscape and visual matters are set out in Table 1 below.
- 3.20. Those policies relevant to the Site and its immediate context in respect of landscape and visual matters are summarised in the following table.

Table 1: Summary of Derby City Council's adopted policies relevant to landscape and visual matters

Policy Ref	Summary of Policy
CP4 – Character and Context	<p>Requires development to contribute positively towards the character, distinctiveness, and identity of the City's neighbourhoods.</p> <p>The Council's assessment of a proposal's suitability will focus on (amongst other aspects) landscaping and boundary treatments, important views to and from the area and of landmark buildings, and any other features of local character or history.</p> <p>Proposals should consider the context of the local area and respond appropriately, particularly those in a 'sensitive local character'.</p> <p>This is a policy that applies across the Plan area, thus including the Site.</p>
CP16 – Green Infrastructure	<p>Through this policy the Council seeks to maintain, enhance and manage Derby's green infrastructure to ensure everyone has access to high quality informal and formal green space.</p> <p>The scope of the policy includes reference to minimisation and mitigation of impacts upon biodiversity, ensuring GI is an integral part of all development proposals, identifying, protect and enhance GI and habitat links, and ensure any adverse impacts on GI elements as a result of development proposals are minimised and mitigated.</p> <p>This is a policy that applies across the Plan area, thus including the Site.</p>

CP18 – Green Wedges	<p>These areas of land are identified in order to define and enhance the City's urban structure, maintain the identity of different neighbourhoods and provide an uninterrupted link to the countryside.</p> <p>Development in the Green Wedge will be limited, and should not endanger the open and undeveloped character of the wedge, its links and GI value. Where development does occur, it should provide opportunities to improve the remaining Green Wedge and ensure that the principles of the policy itself will be continued.</p> <p>The Site is situated on the eastern edge of the Green Wedge between Spondon and Cherry Tree Hill (Chaddesden). A detailed review of the Site in the context of this green wedge is provided at Appendix B.</p>
CP20 – Historic Environment	<p>The policy states that the Council recognises the historic environment as one of Derby's greatest resources and will protect it through the preservation, enhancement, restoration and repair of heritage assets. The policy notes that 'development proposals that would detrimentally impact upon the significance of a heritage asset will be resisted' and then goes on to set out more detailed criteria.</p>
Saved Policy T15 Protection of Footpaths, Cycleways and Routes for Horseriders	<p>The Council will seek to protect and improve existing such routes throughout the Plan area, particularly those shown on the Proposals Map.</p> <p>There is a public footpath along the southern boundary of the Site, but this does not comprise one of the Plan's identified routes.</p>

Landscape Related Designations

- 3.21. The Site is not situated within or in close proximity to any designations of relevance to landscape and visual matters, such as Areas of Outstanding Natural Beauty (AONBs), National Parks or Registered Parks and Gardens (RPG).
- 3.22. There is an RPG just over 1km to the north-east; Locko Park Grade II listed; and a Conservation Area within Spondon no closer than circa 250m to the south-southeast (refer to Figure 2, Planning Designations).
- 3.23. Where relevant, these matters are considered in the analysis of constraints and opportunities undertaken for the Site and the subsequent appraisal of impacts.

Physical Landscape Resource

- 3.24. Further to the 'Site Context and Overview' included in Section 1, additional information and a more detailed description on the physical components, landscape character and visual amenity of the Site's context and study area are set out in later sections.

Development and Transport Patterns

- 3.25. The Site sits along the western settled edge of Spondon, which lies to the east of Derby city centre and associated suburbs. These suburban areas include Chaddesden and Cherrytree Hill to the west, the latter's eastern extents defined by Acorn Way which links Oakwood (north-east Derby) with the A6005 and A52 on the eastern edge of Derby.

- 3.26. The A52 passing approximately 1km to the south of the Site is a trunk road connecting Derby with Nottingham city around 16km to the east and the M1 motorway at Junction 25 just over 7km east of the Site. The A6005 connects Cherrytree Hill with Spondon, Borrowash, Long Eaton and a series of other smaller settlements between Derby and Nottingham.
- 3.27. Notable routes also include the A6096 through Spondon to the north-east and the A511 / A6 extending south to the A50 (passing to the south of Derby) from the interchange with the A52 and A6005. Other roads comprise principal routes through the surrounding settlements, minor residential routes and a limited number of lanes.
- 3.28. A railway line between Derby and Nottingham and serving Spondon and Long Eaton runs along the Derwent Valley, broadly following the route of the A6005. Other infrastructure includes a line of pylons and high voltage power lines along the Derwent Valley and two others passing to the east of Spondon from the north and over the A52 and A6005 as well as a sewage works sitting in the valley.

Land Use

- 3.29. Within the Site's study area there are a diverse range of land uses beyond the city suburbs and peripheral settlements. As noted above, to the south these include a network of primary roads and rail infrastructure, sewage treatment works, two large wind turbines and a number of business parks and commercial / industrial estates. These estates include units on the former power station site east of the sewage works. To the north land is agricultural (comprising some pasture and swathes of arable) punctuated by select areas of parkland or nature reserves and scattered woodlands of variable sizes.
- 3.30. In the Site's immediate context lies the Springfield Primary School to the south of the Site, with West Park (secondary) School a short distance further south. There is a covered reservoir adjoining the north-eastern boundaries of the Site, together with two communications masts.
- 3.31. Beyond the western residential area of Spondon, land is primarily cultivated or grazed. Pasture is more prevalent closer to the settlement edge, with an increasing occurrence and field size associated with arable farming. Locko Park to the north-east is largely grazed parkland with some woodland belts, blocks and clumps. Select small wooded areas occur in close proximity to the south of the Site, including at West Park Meadow Nature Reserve to the south-west.

Topography and Hydrology

- 3.32. At its highest the Site is around 90m Above Ordnance Datum (AOD) in the northern extents, falling reasonably evenly to around 75m AOD in the south-western corner.
- 3.33. The topography of the Site's local context exhibits some variability due to a series of brooks and other minor tributaries draining north to south into the River Derwent. These watercourses include the Lees Brook (passing to the north of Spondon and Cherrytree Hill) leading into the Chaddesden Brook (flowing south between Chaddesden and Cherrytree Hill). The River Derwent itself meanders through a wide shallow valley to the south of the A52. It flows south towards Derby City centre and then east-southeast to join the River Trent.
- 3.34. Consequently, landform local to the south comprises the lower-lying relatively flat landscape of the Derwent Valley floodplain to the south of the A52 (typically between 30 and 50m AOD), with rising and undulating land to the north of this road with some subtle 'ridges' of highest ground between watercourses (around Spondon and Chaddesden up to circa 120m AOD).

- 3.35. Land along the western and northern edges of Spondon are undulating, but in general fall to the west and south. At the north-western settlement corner (just below which the Site is located) land is up to 92m AOD. Further south, land rises to just over 85m AOD (at West Park School) before falling towards the river valley. Much of the northern fringe of Spondon slopes from around 90m AOD into the Lees Brook Valley, however, to the north-east land rises to localised high ground at 120–125m AOD.
- 3.36. There is a lake within Locko Park ('The Lake') and a number of other waterbodies within the Derwent floodplain closely associated with the river course and the sites of former (restored) sand and gravel extraction.

Vegetation Patterns

- 3.37. Typical structural landscaping is rectilinear in pattern and comprises field hedges with numerous but irregularly distributed hedgerow trees. There are a number of woodland blocks of varying size to the north in the vicinity of Locko Park.
- 3.38. Other notable vegetation occurs in the form of tree lines along water courses and providing the definition to some field boundaries, around and within nature reserves, flanking transport corridors in some places, and riparian and floodplain vegetation following the river.
- 3.39. Settlement edges are variously vegetated, but typically have limited screening. Exceptions in the study area are the allotment gardens on the northern edge of Spondon, the south-west of Spondon (Near Bridgeside Park and the train station, and the northern edge of Cherrytree Hill. Much of the eastern edge of Cherrytree Hill is screened by vegetation along Acorn Way.

Public Access

- 3.40. There is a good network of Public Rights of Way (PRoWs) to the east, west and north-west of Spondon, with links to Chaddesden, Cherrytree Hill, Ockbrook to Locko Park. These largely comprise footpaths with some bridleways and a byway through Locko Park.
- 3.41. Regarding the Site itself, a public footpath extends from Royal Hill Road westwards along a track adjoining the southern boundary of the Site, and another along Longley Lane past the covered reservoir and meeting the northern-most point of the Site before turning north across surrounding fields.
- 3.42. Publicly accessible land in the vicinity of the Site comprises Spondon Park (off the A6005 and Park Road near West Park School) and the West Park Meadow Nature Reserve.
- 3.43. There is no common / access land within or in close proximity to the Site.

Landscape Character

- 3.44. Reference has been made to published guidance on landscape character for the area. The Site is located in the following: (refer to Figure 4, Landscape Character):
- NCA38: Nottinghamshire, Derbyshire and Yorkshire Coalfields;
 - East Midlands Regional Landscape Character Area 5a: Village Farmlands; and
 - Derbyshire County Landscape Character Type: Lowland Village Farmlands.

- 3.45. The following sections set out a summary of the characteristics relevant to the Site and its local context.

National Landscape Character

- 3.46. The National Character Area profile published in 2014 for NCA38 describes this landscape as *"a generally low-lying area, with hills and escarpments above wide valleys. The landscape embraces major industrial towns and cities as well as villages and countryside"*, with this development and industrialisation having a notable influence upon the visual and ecological nature of the landscape. While there are typically very few designated areas for nature conservation, it is considered to be a landscape 'dotted' with pockets of habitat.

- 3.47. The Coalfield's key characteristics are set out below. Descriptors of greater relevance to the Site and study area, are highlighted in **bold**:

- ***"A low-lying landscape of rolling ridges with rounded sandstone escarpments and large rivers running through broad valleys, underlain by Pennine Coal Measures.***
- *Local variations in landscape character reflecting variations in underlying geology.*
- ***Several major rivers flow through the rural and urban areas of the NCA, generally from west to east in broad valleys.***
- ***A mixed pattern of built-up areas, industrial land, pockets of dereliction and farmed open country.***
- ***Small, fragmented remnants of pre-industrial landscapes and more recent creation of semi-natural vegetation, including woodlands, river valley habitats and subsidence flashes, with field boundaries of clipped hedges or fences.***
- ***Many areas affected by urban fringe pressures creating fragmented landscapes, some with a dilapidated character, separated by substantial stretches of intact agricultural land in both arable and pastoral use***
- *A strong cultural identity arising from a history of coal mining, steel making and other heavy industry which resulted from the close relationship between underlying geology and resource availability, notably water power, iron ore and coal*
- *Features of industrial heritage such as mills, goits, tips, old railway lines, canals and bridges are evident, along with former mining villages.*
- ***Many large country houses and estates established by wealthy industrialists in the 18th and 19th centuries*** and ancient monuments create focal points and important recreational opportunities within the landscape, such as Bretton Hall, Wentworth, Woodhouse, Temple Newsam, Nostell Priory, Bolsover Castle and the ruins of Codnor Castle.
- *Extensive urbanisation, such as in the major cities of Leeds and Sheffield, with terraced and back-to-back housing and grand 19th-century municipal buildings and churches at their centres, now surrounded by extensive housing and industrial development.*

- ***Widespread influence of transport routes, including canals, roads and railways, with ribbon developments emphasising the urban influence in the landscape.***
- *An extensive network of multi-user trails on former railway lines and canal towpaths, such as the Trans Pennine Trail and the Ebor Way.*
- *Continuing development pressure including land renewal and regeneration projects, especially along river corridors and around towns."*

3.48. The 'Landscape change' section notes the continued pressure for development, including housing, which in many cases exhibits standard design that does not reflect local styles or building materials.

3.49. The 'Statements of Environmental Opportunity' (SEOs) include the following:

- SEO1: *"Restore and enhance existing areas and create new landscapes through the inclusion of woodland and networks of green infrastructure to raise the overall quality of design and location of new developments"* (such as though the creation of new easily accessible green spaces close to where people live, and of new landscapes sympathetic to the local context that incorporate habitats which benefit biodiversity)
- SEO3: *"Conserve, enhance and expand areas and corridors of semi-natural habitat such as grasslands and woodlands to create a functioning ecological network that links the fragmented patches of habitats through urban and sustainably farmed environments..."*

3.50. Although the Site and its immediate context lie within NCA38 it also lies close to the boundary with NCA69: the 'Trent Valley Washlands' (the profile for which was published in 2013), an area which encompasses the lower-lying valleys of the Derwent and Trent, and consequently the landscape within the south of the study area.

3.51. The key characteristics are set out below.

- *"Distinctly narrow, linear and low-lying landscape largely comprised of the flat flood plains and gravel terraces of the rivers and defined at its edges by higher ground.*
- *Geology dominated by superficial alluvium and gravel river terrace deposits underpins the contrast in arable and pastoral agricultural use, arable crops predominating on the free-draining soils of the river terraces, with grassland more commonly located along the alluvial river flood plains where soils are subject to frequent flooding or are naturally wet.*
- *Flood plain pastoral areas where riverside pastures are subdivided by thick, full hedgerows with some trees contrast with arable areas with larger fields divided by low, small hedgerows with few trees.*
- *Limited tree cover, but local concentrations give the impression of a well-timbered landscape in many places. Riparian trees, especially willows, provide an important component.*
- *A landscape strongly defined by its rivers and their flood plains with the extensive canal network adding significantly to the watery character and providing major recreational assets for the area.*

- *Diverse range of wetland habitats supporting notable species such as spined loach and bullhead fish, otter, water vole, white-clawed crayfish, shoveler, bittern, lapwing, snipe and redshank.*
- *Rich history of human settlement and activity reflected in the archaeology and historic buildings with a particular focus on river crossing points and the gravel terraces, as well as being significant for early Christianity in the Midlands, and later for its canal and brewing heritage.*
- *Settlement pattern heavily influenced by flood risk, confining villages to the gravel river terraces and to rising ground at the edges of the flood plains. Traditional buildings are characteristically of red brick and clay plain tile with earlier timber frame and grander dwellings and churches typically built from sandstone. Red brick and Welsh slate of 19th and early 20th century urban expansion prominent in larger settlements along with modern housing and development.*
- *A landscape heavily used as transport and communication corridors along the rivers and canals, for major roads and railways, and for power lines.*
- *A landscape marked by extensive sand and gravel extraction, power stations and prominent urban-edge industrial and commercial development."*

Regional Landscape Character

- 3.52. The East Midlands Landscape Partnership (EMLP) prepared the East Midlands Region Landscape Character Assessment (EMRLCA) in April 2010 to help provide a better understanding of the region's landscape and thus a better approach to its future protection, planning and management. The study identified distinctive, rare or special characteristics and divides the region into 31 landscape character types (LCTs).
- 3.53. As is much of the landscape between Nottingham and Derby, as well as Derby's suburban fringes, the Site and majority of the study area lies within LCT 5a the 'Village Farmlands' which forms part of a wider group of similar 'Village Farmland' landscape types. The Derwent valley falls within the 'River Valley Floodplains' group, and more specifically within LCT 3a: the 'Floodplain Valleys'.
- 3.54. The 'Village Farmlands' are noted as forming part of an extensive tract of landscape that extends well beyond the East Midlands. These are intensively farmed landscapes with limited remnants of semi-natural vegetation, with woodlands, copses and occasional meadows playing an important role in the connectivity of habitats, together with hedgerows and watercourse corridors. Country houses with landscaped parks (particularly around Derby) are noted as having a strong – albeit localised – influence on the landscape. It is noted that the rural landscape "while not particularly tranquil" has a quiet character with notable modern development on the fringes of settlements. Although displaying some local variation, these are typically visually unified landscapes with a limited palette of elements and features where the undulating landform, pattern of tree cover and hedgerow networks all contribute to the sense of cohesion. Despite the low levels of woodland, trees in the landscape collectively filter views and provide a sense of visual and physical enclosure.

3.55. The key characteristics of LCT 5a are as follows:

- *“Gently undulating lowlands, dissected by stream valleys with localised steep slopes and alluvial floodplains;*
- *Moderately fertile loamy and clayey soils with impeded drainage over extensive till deposits on higher ground and gravel terraces bordering main rivers;*
- *Mixed agricultural regime, with localised variations but with a predominance of either dairy farming on permanent pastures, or arable cropping;*
- *Small and moderately sized broadleaved woodlands and copses, often on sloping land; extensive new areas of planting associated with The National Forest;*
- *Hedgerows and frequent oak and ash trees along hedgelines and streams contribute to well treed character of landscape;*
- *Moderately sized well maintained hedged fields across rolling landform create patchwork landscape of contrasting colours and textures;*
- *Extensive ridge and furrow and small historic villages linked by winding lanes contribute to historic and rural character of the landscape; and*
- *Localised influence of large estates.”*

3.56. Regarding the landscape change and management, the ‘Forces for Change’ section notes the increasing pressure from development placed on villages in closest proximity to cities within or adjoining the LCT, creating visual intrusion.

3.57. In terms of ‘Shaping the Future Landscape’, *“the aim should be to protect the character of villages and consider the visual impact of any new development... Planting of trees around settlement fringes should also be encouraged, helping to integrate new development into the landscape.”* Any woodland planting proposals should be mindful of suitability of location, considering the existing small-scale and typically scattered nature of existing features, associating new planting with existing woods and also putting emphasis on the management of existing trees and woodland.

3.58. The ‘Floodplain Valleys’ (to the south of the A52 and A6005) are typically unsettled but are noted as being subject to considerable localised influence from the region’s major centres of urbanisation. Its perceptual qualities are subject to considerable influence from the nature of local land cover and uses, resulting in a varied aesthetic: this can range from tracts of floodplain with an intact and traditional character, to a starkly contrasting and highly distinctive areas of cereal farming, through to visually prominent urban fringes with waste treatment, transport and energy infrastructure set against a backdrop of urban development.

3.59. The key characteristics of LCA3a are defined as:

- *“Deep alluvium and gravel deposits mask underlying bedrock geology to create wide, flat alluvial floodplains surrounded by rising landform of adjacent [LCTs];*
- *Predominance of pastoral land use, with cereal growing increasing in some areas. ‘Warping’ areas subject to more intensive cereal growing;*

- *River channels, often along managed courses, bordered by riparian habitat;*
- *Limited woodland cover; however, steep riverside bluffs and areas close to settlement or on former gravel extraction sites notable for a higher level of woodland cover;*
- *Regular pattern of medium to large fields defined by hedgerows or post and wire fencing, breaking down and becoming open in some areas;*
- *Hedgerow and riverside trees important component of landscape. Alder, Willow and Poplar are typical riverside trees;*
- *Limited settlement and development in rural areas;*
- *Sewage Treatment Works and power stations common close to larger settlements that fringe the floodplains;*
- *Roads and communication routes often define the outer edges of the floodplain; and*
- *Restoration of sand and gravel extraction sites to open water creates new character across many areas."*

County Landscape Character

- 3.60. The fourth edition of the 'Landscape Character of Derbyshire' (LCoD) was published by Derbyshire County Council in March 2014. This utilises the National Character Areas as the basis of its assessment, refining the boundaries between the NCAs to reflect the more detailed County-level assessment. These NCAs are subdivided into composite Landscape Character Types (LCTs).
- 3.61. Additionally, the LCoD includes guidance on the key landscape management aims for each LCT, an assessment of 'Relative Tranquillity' and identifies 'Areas of Multiple Environmental Sensitivity' (AMES), which have been mapped for the whole County as part of the same study.
- 3.62. Much of the study area for the Site is defined as 'Urban', including land north of the river between the A6 and Borrowash, which constitutes the majority of the Derwent valley floor immediately east of Derby city centre.
- 3.63. As noted above, the Site and its immediate context lies close to the boundary of two NCAs; at National level just within NCA38 (Nottinghamshire, Derbyshire and Yorkshire Coalfields). However, the refined assessment undertaken for the LCoD places the Site and much of the land between the Derby suburbs and Spondon as falls within the 'Trent Valley Washlands' at a County level, and more specifically within the 'Lowland Village Farmlands' LCT.
- 3.64. The north-east of the study area (encompassing land adjoining the north-east of Spondon and around Locko Park) falls within the 'Plateau Estate Farmlands' LCT which form part of the Yorkshire, Nottinghamshire and Derbyshire Coalfield Character Area.
- 3.65. The key characteristics of the 'Lowland Village Farmlands' are:
- *"Gently rolling, almost flat, lowland with river terraces*
 - *Low slopes and summits give a sense of elevation over a broad flood plain*

- *Mixed farming with arable cropping and improved pasture*
- *Thinly scattered hedgerow trees including some willow pollards*
- *Scattered, locally dense, watercourse trees*
- *Medium to large regular fields with thorn hedgerows*
- *Discrete red brick villages with farms and cottages*
- *Large red brick outlying farms*

3.66. The document notes the variable tree cover including largely absent woodland and sparsely scattered hedgerow trees and wooded blocks, but locally dense trees along watercourses. The enclosure pattern is considered an important characteristic in defining the landscape's scale, which takes the form of predominantly hawthorn hedgerows demarcating medium to large semi-regular and regular field parcels with some loss to farming intensification. Settlement is typically nucleated and located on the valley slopes and gravel terraces immediately off the floodplain. Major change has been driven by historic large-scale gravel extraction, with other notable influences including the A52, pylons and overhead powerlines.

3.67. The LCoD also includes LCT-specific 'Planting and Management Guidelines'. For the Lowland Village Farmlands these include:

- Conservation and enhancement of tree groups occurring in and around rural settlements;
- The continued practice of pollarding where appropriate to maintain the riparian character of the landscape; and
- Ensuring new woodland does not conflict with characteristic features of the landscape.

3.68. Across the county, the occurrence of the 'Plateau Estate Farmlands' is limited to a single tract of land from the north-eastern edges of Derby to the River Trent corridor to the east. It is described as having 'a distinct sense of elevation with long distance views over surrounding lower lying land'. Smaller plantations and parkland trees within the predominantly arable farmland indicate the estate ownership of the landscape and – together with mature oaks – are considered indicative of once-extensive ancient woodland.

3.69. Key characteristics comprise:

- *"Upstanding, gently undulating plateau*
- *Mixed farming Scattered hedgerow trees, predominantly oak*
- *Small plantations*
- *Parkland and ornamental tree belts associated with country houses*
- *Medium to large fields*
- *Relict parkland and former commons now enclosed and farmed*

- *Dispersed [red brick] estate farmsteads and cottages ...with clay tiles and slate roofs*
- *Sense of elevation with long distance views"*

Landscape Management and Change

3.70. This guidance seeks to assist in the design and location of new development, and is presented in the form of a summary table, targeting key landscape considerations for each LCT, including primary aims and secondary aims.

- Site: as per the Lowland Village Farmlands
- Lowland Village Farmlands: Conservation of rural character, of the settlement pattern, and of the primary field boundaries, hedgerow replanting and management (Primary Aim); Conservation of vernacular pattern and the historic field pattern (Secondary Aim)
- Plateau Estate Farmlands: Conservation of rural character and primary field boundaries, (Primary Aim); Conservation of vernacular pattern and hedgerow replanting and management (Secondary Aim)

Areas of Multiple Environmental Sensitivity (AMES)

3.71. The document identifies and combines multiple sensitivities (landscape, ecology and historic environment) in order to facilitate and highlight more appropriate areas for development, presented by way of an AMES map illustrating Primary and Secondary Sensitivity areas. The Site and LCT ratings are summarised below:

- the Site: not situated within either a primary or secondary area of combined sensitivity.
- Lowland Village Farmlands: neither a primary nor secondary area of combined sensitivity.
- Plateau Estate Farmlands: partly no combined sensitivity (adjoining Chaddesden) and partly secondary sensitivity (directly north of Spondon and encompassing Locko Park).

Tranquillity

3.72. This technical document was produced to support the 'Landscape Character of Derbyshire' county-level character assessment. Building on the analysis undertaken for CPRE's national tranquillity map of 2008, the document sought to map the current resource to provide a spatial context for considering tranquillity across the County in order to help inform the planning process. With 5 grades from least to most tranquil, these will be referred to as Low – Low to Medium – Medium – Medium to High – High. The relevant gradings are as follows:

- The Site: low to medium, directly adjoining an area of low tranquillity (Spondon)
- Lowland Village Farmlands: low to medium tranquillity
- Plateau Estate Farmlands: partly low to medium (adjoining Chaddesden) and partly medium (directly north of Spondon and encompassing Locko Park)

Landscape Character Summary

- 3.73. The Site lies on the edge of a tract of farmland abutting the western fringes of Spondon, which itself sits on the northern slope of the Derwent Valley at the southern tip of the shallow Derbyshire coal measures. Therefore, the Site's context forms part of a transitional landscape between a broad river corridor and the adjoining rising or undulating coalfield farmlands. Consequently, the Site is defined in published character assessments as both within a wider river valley character area encapsulating fringing farmland, and as farmland within a neighbouring character area which adjoins the floodplain.
- 3.74. At a National Level, the Site lies just within the boundary of the 'Nottinghamshire, Derbyshire and Yorkshire Coalfields', which rises above the adjoining broadly defined lower-lying washlands of the River Trent and its various tributaries including the Derwent.
- 3.75. At a regional level, the floodplain valleys are more specifically defined as they occur passing through adjacent character areas. The Site sits in one of the units of the 'Village Farmlands' LCT which forms part of a wider group of Village Farmland types, and which are frequently identified along the courses of the rivers flowing through the region and are noted as being typically dissected by stream valleys; as evidenced in the Site's context.
- 3.76. At the county level, the Site lies within a 'Lowland Village Farmlands' LCT that is associated with the Trent Valley Washlands character area rather than the Coalfields landscapes. While the characteristics and description of the LCT make reference to the gravel terraces and floodplain, they focus on the adjoining farmland on the valley slopes.
- 3.77. However, regardless of the attribution of the landscape around Spondon at the higher level of classification within respective published documents, the evaluation undertaken for this LVIA identifies that the Site's immediate context shares a number of common characteristics across the landscape character assessments referenced above at their most detailed levels. Those considered to be consistent with the Site's context and across the publications include:
- Gently undulating topography sloping into a wide floodplain with gravel river terraces;
 - Low slopes are elevated over the broad adjoining floodplain;
 - Mixed agricultural regime, with localised variations but with a predominance of either improved pasture or arable cropping;
 - Network of hedgerows with scattered hedgerow trees and locally dense trees / tree lines along watercourses, both of which contribute to the sense of a well wooded landscape;
 - Medium to large regular or semi-regular fields with predominantly thorn hedgerows;
 - Discrete red brick villages and dispersed outlying farms;
 - Largely absent woodland in the vicinity of the Site, but with some small and moderate blocks and copses; – often on sloping land – to the north;
 - Localised influence of country houses and large estates; and
 - Existing industrial and infrastructure influences and continuing development pressure in the floodplain close to the urban edge.

Visual Baseline

- 3.78. This section provides a description of the nature and extent of the existing views from, towards and between the Site and the surrounding area. It also includes reference to specific locations that will potentially be subject to impacts as a result of the proposed development of the Site.

Overview

- 3.79. The visual envelope is the area of landscape from which a site or proposed development will potentially be visible. It accounts for general judgements on the theoretical visibility of a site or proposed development and sets a broad context for the study area within which to address landscape and visual impacts. The extent of a visual envelope will be influenced by the physical landscape components of an area, such as hedgerows, woodlands or buildings and can also be influenced by distance from a site.
- 3.80. A computer generated ZTV has been produced for the site (refer to **Figure 5, ZTV and Viewpoint Locations**); this is based on initial assumptions regarding the potential for development (including building heights) and accounts for some degree of screening by existing built form and vegetation.
- 3.81. The ZTV was prepared at the early stages of the process, based on an indicative development envelope (albeit landscape led) and gives an overview of potential visibility to inform the site visit and field work.
- 3.82. Although the ZTV represents a 'screened' scenario, the OS data sources only tend to include notable blocks of trees and woodland. Given that much of the existing green infrastructure around the Site comprises hedgerows, hedgerow trees and smaller scale woodland / tree belts, these are not included in the ZTV but nevertheless form a 'layering effect' in screening terms. Consequently, overall screening value is underestimated and the ZTV represents a 'worst-case scenario', although potential visual receptors are identified on this basis.
- 3.83. The scope of visibility of the Site is considered primarily to be restricted by settlement on the valley slopes to the east and west, as well as within the valley to the south. Elevated land to the north provides the opportunity for long-distance views towards the Site, where the undulating nature of the landform and intervening vegetation allows.
- 3.84. Based on the ZTV and informed by subsequent site survey and observations from the field work, the visual envelope is broadly defined as follows:
- East: by the developed edge of Spondon
 - North-east: up to Spondon Wood and land around Locko Park
 - North: High ground east of Chaddesden (broadly demarcated by Derby Road)
 - West: by the settled edge of Derby
 - South: by the Derwent Valley and development along the A6005
- 3.85. In addition, the LVIA also noted potential views from beyond the visual envelope described above, namely select areas within the wider developed extents of Derby to the south-west.

Representative viewpoints and visual receptors

- 3.86. The visual assessment references a series of viewpoints that are representative of visual receptors in the area. These illustrate views towards the Site in the context of the surrounding landscape and are used to inform judgements on impacts for specific receptors (refer to **Figure 5, ZTV and Viewpoint Locations** and **Figure 6, Viewpoint Photographs 1 to 10**).
- 3.87. Potential visual receptors considered as part of the baseline analysis included:
- ProW users passing the southern boundary of the Site and at short distance to the south-west between Royal Hill Road and Acorn Way;
 - PRow users along footpaths passing the northern boundary of the Site and in close proximity to / approaching from the north;
 - Residents on the western fringes of Spondon;
 - Residents generally on the eastern fringes of Derby;
 - Road users along Acorn Way;
 - Road users along local routes to the north (Locko, Road and Derby Roads);
 - PRow users north of Spondon at mid-distance from the Site;
 - PRow users along footpaths and the bridleway at medium to long distance to the north;
 - PRow users at long distance to the north-east;
 - Recreational visitors (PRow users) travelling through Locko Park; and
 - Receptors in select location within the urban area of Derby (i.e., Pride Park and the Cemetery)
- 3.88. These visual receptors are considered further as part of the assessment of visual effects.

4. Development and Landscape Strategy

Overview

- 4.1. To form judgements on the capacity of any given landscape to accommodate specific types of development (without an undue degree of landscape and visual impact) it is necessary to understand the nature and characteristics of the type of development proposed.
- 4.2. This section of the LVIA considers the type of development proposed and the nature of the impacts that are likely to occur; thereafter it draws the landscape and visual baseline information together and summarises the key constraints and opportunities in the existing landscape.

Development Proposals

- 4.3. In summary, the proposed development comprises:
- Circa 2.2 hectares residential development delivering up to 90 dwellings;
 - Circa 2.3 hectares green infrastructure, including public open space, existing hedgerow / tree retention, community orchard, pedestrian / cycle links and equipped play provision, and surface water run-off attenuation; and
 - Primary vehicular access via the south-east corner of the Site off Royal Hill Road.

Likely Causes of Impact

- 4.4. Although a landscape has some intrinsic sensitivity, different landscapes contain a range of components which will respond differently to change, subject to the type of the development that is proposed. Consequently, in order to inform the analysis of impacts, judgements should be made with reference to the specific changes which arise from the type of development being considered.
- 4.5. The following section sets out the likely causes of impacts which would occur in relation to the specific type of development proposed (i.e. residential-led development).

Causes of Temporary Impact during Construction

- 4.6. The temporary construction works which may give rise to impacts on landscape and visual receptors are listed as follows:
- Installation of tree and hedgerow protection fencing;
 - Presence and movement of associated construction vehicles and plant;
 - Presence of construction compounds, site offices and welfare facilities;
 - Site clearance works (including any necessary removal of existing vegetation);
 - Construction of the proposed access off Royal Hill Road;

- Earthworks, groundworks and infrastructure/service installation;
- Construction of new residential dwellings; and
- Landscaping operations associated with the delivery of new internal structural planting, landscape buffers, public open space and private garden spaces.

Causes of Impact at Completion

- 4.7. The permanent components of the proposed development which may give rise to impacts on landscape and visual receptors are listed as follows:
- The built form of residential development;
 - highways infrastructure (including lighting); and
 - Mitigation integrated into the proposed development (i.e. green infrastructure and strategic landscaping), including retained trees, hedgerows, open space provision, SUDs, community orchard provision and new planting.
- 4.8. Together the cause of impacts at construction and operation informs the following analysis of constraints and opportunities.

Site specific landscape and visual analysis

- 4.9. The site-specific landscape and visual analysis can be summarised as follows:
- Divided into paddocks by fencing and hedgerows, the Site is a simple composition of land use and features with a relatively small-scale rectilinear field pattern;
 - The Site sits on sloping ground on the rolling northern Derwent valley slope, with the northern boundary of the Site rising close to a localised 'ridge';
 - Considering built features in the immediate vicinity to the north and south (comprising the covered reservoir and communications masts, dwellings and schools, respectively), the Site is 'set into' the pattern of built elements forming the settlement edge and is well related to the urban fringes;
 - It does not display any rare or unique features within or adjoining the boundaries and does not include any features of particular note, nor does it form part of or adjoin any formal landscape-related designations; and
 - The Site is typically physically well enclosed, by proximate built form and landscape features, although it is comparatively more open to the west; and
 - Views of the Site are similarly well enclosed, confined to the immediate and short distance to the south, east and north and very limited receptors to the west.

Constraints and Opportunities

- 4.10. The following key constraints and opportunities have been identified during the landscape and visual analysis (including reference to field work and desk study of landscape character guidance).
- 4.11. Landscape and visual constraints associated with the Site are summarised as follows:
- The existing framework of hedgerows and trees along many of the Site's perimeter and internal field parcel boundaries needs to be retained wherever possible as it benefits the capacity (and screening) of the Site;
 - The position of the Site on the undulating northern valley slope to the Derwent Valley, whereby the north of the Site is both the most elevated and in close proximity to a localised 'ridge' on the undulating valley slope;
 - The local PROW network where this passes near to and adjacent to the Site together with the potential for views towards the proposed development; and
 - Short and immediate distance views from residences along Royal Hill Road fronting towards the Site, and from properties elsewhere in close proximity to the western Site boundary.
- 4.12. Opportunities for the Site are considered to be:
- The presence of built form (the schools, reservoir, masts and farm complexes in addition to existing residences) in close proximity to the Site that already contribute to the existing character of the landscape of the western edge of Spondon in which the Site is situated;
 - The strong relationship between the Site and the existing residential edge of Spondon and its influence on the character of the Site;
 - Limited inter-visibility between the Site and much of the study area generally due to combinations of settlement, intervening vegetation / woodland and the rolling topography;
 - Potential for greater public accessibility; and
 - Opportunities for enhancement and reinforcement of existing Site and field boundary features, such as gappy or absent hedgerow sections.
- 4.13. The analysis of these can be used to inform the design process and to avoid or minimise potential impacts.

Landscape and Visual Strategy

- 4.14. Having considered the landscape and visual analysis, the constraints and opportunities have been used to influence the design of the emerging masterplan and layout.

- 4.15. This ensures that matters of landscape character and visual amenity are embedded in the proposals and mitigation measures included to avoid or minimise impacts are an integrated part of the proposed development.
- 4.16. The landscape led approach to mitigation is described in the following sections (and illustrated in Figure 7, Illustrative Landscape Masterplan).

Table 2: Summary of integrated landscape and visual mitigation

Strategy component	Key points	Published characteristics and guidance for the Lowland Village Farmland LCT
Development envelope	<ul style="list-style-type: none"> Set directly adjacent to the existing settlement edge, which comprises relatively modern residential development Concentrated to a limited portion of the Site, where there is an existing close relationship with, and influence from, the residential edge Influenced by the existing western built extents in the local landscape Whilst indicative, the extents and area occupied by the development envelope is defined within the scheme's parameters Occupies less than half of the total area of the Site 	<ul style="list-style-type: none"> typically nucleated settlement located on the valley slopes conserve the settlement pattern
Existing vegetation and green infrastructure strategy	<ul style="list-style-type: none"> Comprises over half the Site (circa 2.3Ha of a total of approximately 4.5Ha). The Site as a whole retains substantial areas of green infrastructure and open space to the north and south, each serving different functions in terms of mitigation. Existing vegetation across the Site is retained and enhanced within the layout wherever possible, including to the boundaries, with supplementary planting to increase structure, diversity and succession. To the south, GI includes informal open space, meadow and sustainable drainage provision. To the north, landscape proposals seek both to integrate with (and enhance) the existing field boundary pattern, as well as providing community facilities (described below in 'Internal Layout and Proposed Open Space'). Proposed new hedgerow planting along the north-eastern section of the boundary, where currently it only comprises a fence to the reservoir compound. Planting proposals and new reinforcement planting (including hedgerow trees) most notably to the western boundaries to improve species diversity, are intended to enhance the existing network of field boundary vegetation, increase linear habitat links and provide a strong western edge of the bordering arable landscape. 	<ul style="list-style-type: none"> Conservation and enhancement of tree groups occurring in and around rural settlements. Ensuring new woodland does not conflict with characteristic features of the landscape. Conserve primary field boundaries. Seek opportunities for hedgerow replanting and management. Conserve vernacular pattern and the historic field pattern.

Strategy component	Key points	Published characteristics and guidance for the Lowland Village Farmland LCT
Internal Layout and Proposed Open Space	<ul style="list-style-type: none"> • Notwithstanding the outline nature of the application, the parameters define the maximum developable area and position, as well as that of the principal areas of open space and green infrastructure elements including retained vegetative features. • Given the large proportion of green infrastructure and open space, there are opportunities to create a development set within a substantial landscape framework of a high-quality design at the detailed stage. • Omission of development from, and allocation of open space in the northern part of the Site, maintaining a sense of openness in the most elevated parts of the Site and reduction in potential visibility of the scheme to the north. • Inclusion of more informal green space and structural planting in the south of the Site close to (and connecting with) existing woodland and tree lines passing the southern boundary of the Site. • More formal structure to the landscape planting in the north of the Site, with a publicly accessible orchard, avenue tree planting and recreational open space together with areas of meadow creation and clumped tree planting. • Enhancements to the existing PRoW network, with multiple connections onto the public footpath passing the southern boundary, through the site via a green corridor, and a new link onto the public footpath at the northern point 	<ul style="list-style-type: none"> • Enclosure Pattern – the spatial distribution and orientation of new buildings responds to the existing pattern of fields and existing boundaries, with northern development limits in line with the southern boundary of the covered reservoir compound. • Site comprises horse grazing, with fields sub-divided by fencing. Characteristic mixed fields of medium to large scale occurring elsewhere across the LCT in close proximity to the Site are preserved. • The species composition of existing long-established hedgerows should be used to guide the composition of new hedgerow planting, with enhancements made where species numbers are limited for biodiversity benefits.

5. Assessment of Landscape Effects

Overview of Landscape Effects

- 5.1. Landscape sensitivity is a term applied to specific receptors, combining judgements on the value related to a landscape (i.e., the receptor) with the susceptibility of the landscape to the specific type of change proposed. Receptors can include specific landscape elements or features or may be judged at a wider scale and include landscape character parcels, types or areas.
- 5.2. As advocated in the GLVIA3, professional judgement is used to balance analysis of value and susceptibility in order to determine sensitivity. Each of these aspects of the analysis will vary subject to the scale and detail of the assessment.
- 5.3. The landscape character of the study area is documented at national and regional levels. The findings of these studies represent a thorough and generally consistent analysis of landscape character and this has been supported by an analysis of the local landscape character of the site in the context of the settlement.
- 5.4. This assessment of landscape effects focuses on the areas of landscape character which are defined by the LCoD, given this examines the landscape context of the Site and study area in greatest detail. This presents guidance at an appropriate scale and also represents the most recent baseline position on landscape character for the area.
- 5.5. The additional guidance produced in support of the LCoD pertaining to tranquillity, AMES and management will be taken into consideration as part of the analysis of landscape value and susceptibility accordingly.
- 5.6. The assessment is then also applied at a more refined level to consider additional judgements based on the landscape character of 'the Site and its immediate context'.

Landscape Sensitivity

- 5.7. In order to inform judgements on value and susceptibility the following section refers to the baseline information (Section 3) and additional consideration of the local character in relation to the site and its immediate context. These judgements are then carried through to the analysis of landscape sensitivity.

Landscape Value

- 5.8. In LVIA, landscape value is the value attached to a potentially affected landscape. It is relative in relation to the different stakeholders and different parts of society that use or experience a landscape. Landscape value is not solely indicated by the presence of formal designations and a range of factors influence landscape value.

- 5.9. The GLVIA3 sets out a range of factors that can help in the identification of landscape value⁸ and these concepts have been expanded in the later LI TGN 02/21⁹.
- 5.10. Whilst these have become commonly accepted, it is important to place them in the relevant context that the GLVIA3 is guidance and that its principles have to be adopted into a formal methodology by practitioners. The criteria for determining landscape value as set out in the methodology (Appendix A) accord with those presented in the GLVIA3 and LI TGN 02/21.
- 5.11. Landscape value will vary in response to the specific landscape that is being considered, even where a landscape is included in the boundaries of a formal designation. This section determines the value of the defined landscapes relevant to the Site and study area. The considerations and professional judgements used in determining value are summarised in the following tables (with reference to GLVIA3, page 84, Box 5.1 and to LI TGN 02/21).

Table 3: Determining Landscape Value

Considerations	Lowland Village Farmlands LCT	Plateau Estate Farmlands LCT	The Site and its immediate context
Formal landscape or landscape related designations	No formal landscape designations	Locko Park RPG	No formal landscape designations
Natural and cultural heritage interests (i.e., ecological, geological or heritage matters)	A local nature reserve. Not an identified AMES.	Locko Park presents some heritage and ecological interest with a number of woodland blocks identified as Priority Habitat. Spondon Wood is also an ancient woodland	No known specific identified cultural or heritage interests. Not within an identified AMES
Landscape condition of individual elements or overall structure	Overall unified structure of scattered woodland blocks and belts set across mosaic of agricultural land and parkland at Locko Park. Field pattern and hedgerows with trees relatively intact and of good condition	Relatively intact structure, although some variability in the continuous nature of hedgerows or loss due to field rationalisation and management; some field boundaries in poor condition and/or formed of post and wire fencing	Characteristic structure largely evident, although this is diminished by subdivision of fields for horse grazing and the notable presence of the settlement edge
Landscape associations	None identified	None identified	None identified
Distinctiveness and sense of place	Some distinctiveness attributed to the hedgerows, watercourse trees and topography providing some sense of place in respect of the transition from the Plateau Estate Farmlands to the River Valley, however this	Views are enclosed, framed or punctuated by the tree cover and woodland dispersed across the agricultural landscape, which provides a unifying element to the LCT.	Very limited distinctiveness given the land use and influence from existing built form and the existing settled edge.

8. Box 5.1, Page 84, Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment 3rd Edition (April, 2013)

9. Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations

	part of the LCT exhibits urban fringe land uses scattered throughout including dog exercising, playing fields and sports facilities.		
Recreational opportunities in the landscape context	There is a good network of PRowS across the LCT. Other facilities include a dog exercise field (Locko Bark) and allotments	Within the study area there are a limited number of PRowS. While there are some public footpath routes through Locko Park this is private land	No public access or public recreation within the Site itself however two PRowS meet the northern and southern boundaries
Perceptual aspects (in respect of scenic / visual quality)	Spondon's settled edge exerts an urbanising influence. Vegetation along Acorn Way and within the LCT (particularly around the nature reserve) reduces the visual impacts of nearby settlement widely experienced across the LCT along with the rolling landform.	The rolling landform, managed farmland and hedges, woodland and parkland at Locko Park all contribute to the scenic qualities of this landscape	The Site is well contained visually, with some degree of relationship with the settlement edge
Perceptual aspects (in respect of wildness and tranquillity)	Very limited wildness or tranquillity due to the urbanising influences of settlement to the east, south and west and traffic noise from along Acorn Way. The LCoD considers this LCT to be of low to medium tranquillity	Greater tranquillity away from the settled edge particularly north of Spondon Wood and in Locko Park. Some disruption by pylons. Land is parkland or farmland so wildness is limited. The LCoD notes that parts of this LCT are of medium tranquillity	Land is managed and adjoins Spondon. Urban edge uses are evident i.e., horse grazing. According to the LCoD the Site itself is of low to medium tranquillity, but its context includes areas of low tranquillity (Spondon).
Landscape function	Includes a local nature reserve and the well treed Lees Brook, however, within the Study Area this LCT comprises a tract of land situated between settlements that is influenced through land use, traffic noise or visually by the nearby urban fringes	A variety of habitats and land uses, although primarily comprising arable farmland, parkland, some pasture / grazing and waterbodies as well as minor watercourses. There are a number of woodlands and tree lines throughout	Primarily horse grazing: aside from the hedgerows around and through the Site, landscape functionality is confined to features within the Site's immediate context and beyond.

Landscape Susceptibility

- 5.12. In LVIA, landscape susceptibility is the ability of a landscape to accommodate change without undue consequences for the maintenance of the baseline situation. Different types of development can affect landscapes in different ways and consequently landscape susceptibility is specific to the type of development proposed (i.e., residential).
- 5.13. This section determines the susceptibility with the considerations and professional judgements used summarised in the following tables.

Table 4: Determining Landscape Value

Considerations	Lowland Village Farmlands LCT	Plateau Estate Farmlands LCT	The Site and its immediate context
Scale of enclosure	Small to medium scale. Some enclosure provided by roadside and watercourse tree lines as well as by the rolling landform.	Medium scale but with some larger (arable) and smaller (urban edge) fields. Frequent scattered woodland provides additional enclosure and creates intimate landscapes.	Relatively small scale due to the subdivision of the small to medium sized fields with fencing into paddocks.
Nature of landuse	Mixed farming with scattered tree cover primarily along water-courses. Some urban edge uses such as dog exercising, sports fields, and reservoir.	Mixed agriculture, although largely arable, together with parkland grassland and pasture at Locko Park. There is a football academy east of Oakwood.	Horse grazing with a small number of shelters / outbuildings.
Nature of existing elements and features	Hedgerows with scattered trees. Some tree lines and small intermittent woodland / tree clumps. Minor valley bottom ditches and streams.	Parkland and farmland with woodland, field and parkland trees, minor watercourses, an ornamental lake and some field ponds.	Vegetation on site is limited to field and the Site boundary hedgerows and some trees. These are not a dominant influence on the local landscape.

Overall Landscape Sensitivity

- 5.14. The following conclusions on sensitivity are based on the detailed description and justification presented in the previous sections, balancing the professional judgements on value and susceptibility.
- 5.15. In drawing together judgements on landscape value and susceptibility in respect of landscape sensitivity, higher levels of landscape sensitivity will occur where landscape value and landscape susceptibility are toward the upper end of the scale.
- 5.16. Lower levels of sensitivity will occur where value and susceptibility are toward the lower end of the scale.
- 5.17. More central levels of sensitivity will occur where one component is toward the higher end of the scale whilst one is toward the lower.
- 5.18. It is important to note that there are graduations within the process which are not clear cut, and professional judgment is used to balance these and determine an overall judgement on sensitivity.

Table 5: Landscape Sensitivity

Landscape character	Value	Susceptibility	Judgement on sensitivity
Lowland Village Farmlands LCT	Medium	Medium	Medium
Plateau Estate Farmlands LCT	Medium to high	Medium to high	Medium to high
Site and its immediate context	Medium	Low to Medium	Low to medium

- 5.19. Following a review of the types of impact on physical landscape resources, the conclusions on landscape sensitivity are then taken forward to address the impact and effect on landscape character.

Landscape Impacts

- 5.20. The following section describes the predicted changes to the physical landscape elements and features on the site that will give rise to the subsequent perceived changes in landscape character.

Impacts on Physical Landscape Resource

- 5.21. Construction impacts will include initial ground preparation, earthworks, demolition and, where necessary, clearance of existing vegetation. Vegetation clearance includes removal of hedgerow sections within the Site and on the boundary to accommodate construction of the proposed residential blocks, vehicular access and internal circulation. This process will also include the implementation of measures such as site hoardings, temporary fencing and vegetation / tree protection measures. These impacts will be temporary.
- 5.22. Impacts at completion are concerned with the long-term alteration in the landscape from the current undeveloped context of the Site to the future scenario of the proposed development, together with the new green infrastructure and open space altering the existing nature of retained undeveloped land. The built form of the proposed development will be complete and form a permanent component in the landscape. At completion, based on the proposed retention of vegetation and new structural planting, the proposed development would be set within an initial framework of established vegetation, with other formal and informal landscape planting implemented as part of proposed development, to become fully established over time.
- 5.23. In the long term, impacts would also be associated with the influence of mitigation measures on landscape character. This establishes the changes to landscape character as a result of built development but with proposed mitigation measures fully established and performing their intended function. The impacts are considered to be long term and not reversible.
- 5.24. In this context, physical landscape impacts are generally considered to be limited to changes in the Site, or on the immediate boundaries of the Site.

- 5.25. Some discreet localised earthworks related to the creation of practical development platforms and for the attenuation will be required, however, the overall of landform profile of the Site would remain apparent.
- 5.26. Impacts would also be generated by the change in land use from the current agricultural enclosure to residentially led development. However, this affects only part of the Site, with little over half the total area retained as green infrastructure which – notwithstanding potential changes in management – is likely to remain as grassland (albeit enhanced through species-enrichment seeding), relatively open in places and include additional structural planting including the introduction of a new community orchard.
- 5.27. Overall, the physical landscape impacts would be direct, limited to the extent of the Site and form only a very small proportion of the wider Lowland Village Farmlands LCT.
- 5.28. These judgements are specific to the individual physical components of the landscape. The overall judgement of landscape impacts subsequently relates to how these components function together, and how they contribute to the character and appearance of the area, which is addressed in terms of the effects on landscape character.

Landscape Character Effects

- 5.29. In the context of the physical impacts considered above, the following sections set out an assessment of the likely landscape effects on the relevant LCA and on the site and its immediate context.

Overview of Landscape Effects

- 5.30. The likely landscape impacts described above are concerned with the physical changes to the site and the loss, or potential loss, of physical elements and features. Aside from the physical changes to land use and the removal of some select sections of hedgerow to facilitate the scheme, the landscape impacts would be concerned with the perception of these changes and subsequent impact on the character and appearance of the landscape.
- 5.31. There would be limited change to the underlying topography of the Site, restricted principally to creation of building platforms within the development envelope together with profiling of the attenuation basins. Areas of the Site retained as green infrastructure would remain as per current levels and overall, the landform will continue to read as part of the gently rising slope up to the north.
- 5.32. The development envelope sits across four field compartments (wholly or in part). One internal hedgerow is proposed for removal due to the narrow dimensions of the smallest field, however, the general pattern and scale of field parcels demarcated by hedgerows is otherwise retained and incorporated into the overall structure of the development and its GI framework, defining discrete blocks of dwellings. Broadly therefore, the scale and pattern of the landscape remains in-tact; furthermore the proposals include for new hedgerow planting to infill gaps in boundary vegetation or provide hedgerow to the boundary where this is currently only formed by fencing; this reflects character guidance in terms of both hedgerow creation and enhancement of such features.
- 5.33. Whilst physical changes would be limited to the Site only, the perception of change in landscape character terms would extend only a very limited distance beyond the Site.

- 5.34. This is due to the containment and influence upon the Site (physically and visually) by the settlement edge to the east and Derby's suburbs to the west, and the rising topography to the south and high ground to the north. The perceived changes to character are restricted and highly localised. This limits the magnitude of impact in terms of spatial area and scale.
- 5.35. Change to the character includes the extension of the settlement edges into the current agricultural context in this small parcel of the landscape. However, such a change would be experienced against the backdrop of the existing settlement edge and the proposed development would not extend the settlement pattern further west, north or south than is currently present in the local landscape. This settlement edge forms part of the baseline against which the impacts on the Site would be set and consequently this limits the overall degree, or magnitude, of impact.
- 5.36. Green infrastructure and structural landscape planting proposed as an inherent part of the scheme would contribute to the mitigation of impacts of the built components of the proposed development. Landscape proposals along the west seeks to reinforce the boundary between the Site and the agricultural landscape to the west. Public open space and orchard planting provides recreational opportunities in the north, with ecological enhancements proposed in the north and south by way of meadow creation, informal structural planting and habitat diversity.
- 5.37. In terms of mitigation inherent in the proposed development, retained hedgerows are used as the basis for the creation of green corridors through the development, with additional benefits to existing landscape elements achieved through new planting that reflects local character as appropriate (including use of native species). The implementation of long-term management and maintenance plans would ensure that both existing and proposed landscape components continue to establish and mature to form additional screening and filtering around and within the Site.

Significance of Landscape Effects

- 5.38. Overall, notwithstanding the outline nature of the application, the masterplan for the proposed development has adopted a positive approach in landscape and visual terms.
- 5.39. The loss of horse grazing to residential built form, set against the existing backdrop of the immediately proximate residential edge is largely the primary source of impacts. There is also the removal of sections of hedgerow to facilitate vehicular access and circulation as well as a single internal hedgerow within the main residential block to the east, albeit landscape proposals include the planting of new hedgerow lengths and sections where gaps exist.
- 5.40. Overall, the scheme seeks to respond to the existing grain and pattern of the landscape relative to its scale, as well as to the characteristics of the landscape at the most detailed level in published guidance, as identified in Section 4 of this LVIA. Where these are referenced, mitigation adopts an approach of retention and/or enhancement.
- 5.41. The overall assessment of effects on landscape character is set out in the following table.
- 5.42. This accounts for the significance of effect at completion of the proposed development, and also a separate assessment of the proposed development after 15 years, when the mitigation proposals are likely to be fully established and performing their intended function (e.g., new landscape planting and screening). The magnitude of impact reflects the level of change including both beneficial and adverse impacts.

Table 5: Assessment of Landscape Effects

Landscape character	Sensitivity	Magnitude of impact		Significance of Effect
Lowland Village Farmlands LCT	Medium	Completion:	Low to Medium	Minor to Moderate Adverse
		Year 15:	Low	Minor Adverse
Plateau Estate Farmlands LCT	Medium to high	Completion:	None	None
		Year 15:	None	None
Site and its immediate context	Low to medium	Completion:	Medium to High	Moderate Adverse
		Year 15:	Medium to High	Minor to Moderate Adverse

- 5.43. As noted above, the perception of change in landscape character terms would extend only a very limited distance beyond the Site due to both physical and visual containment of the Site within the local landscape. Consequently, it is considered that development proposals within the Site would not result in any impacts upon the 'Plateau Estate Farmlands', and this is reflected in the assessment of landscape effects in the above table: this LCT lies well beyond the small valley in which the Site sits, at 0.8km to the north-east at its closest point, and there is very little intervisibility. Furthermore, the Site is separated from the LCT by the north-west of Spondon and the covered reservoir compound and built structures.

6. Assessment of Visual Effects

Overview of Visual Sensitivity

- 6.1. The sensitivity of a visual receptor is a function of the value attached to a particular view balanced with the susceptibility of the visual receptor to changes in a view and/or visual amenity. The criteria for the sensitivity of visual receptors are set out in the detailed methodology (**Appendix A**).

Visual Impact

- 6.2. Visual impacts are considered separately to landscape impacts. For landscape impacts it is necessary to understand the combination of direct and indirect impacts on the landscape resources potentially affected by a proposed development and therefore it is possible to provide a description and overview of the key impacts that are likely to affect the study area.
- 6.3. However, for visual receptors it is necessary to understand the specific, direct impacts on each view. Therefore, the causes of impact are considered on the basis of individual receptors and are set out in the following sections as an integral part of the assessment of visual effects.
- 6.4. The visual receptors initially identified through desk study and the ZTV as potentially subject to experiencing change to their views as a result of the scheme were noted in the baseline section as primarily including:
- Prow users passing the southern boundary of the Site and at short distance to the south-west between Royal Hill Road and Acorn Way;
 - PRoW users along footpaths passing the northern boundary of the Site and in close proximity to / approaching from the north;
 - Residents on the western fringes of Spondon;
 - Residents on the eastern fringes of Derby;
 - Road users along Acorn Way;
 - Road users along local routes to the north (Locko, Road and Derby Roads);
 - PRoW users north of Spondon at mid-distance from the Site;
 - PRoW users along footpaths and the bridleway at medium to long distance to the north;
 - PRoW users at long distance to the north-east;
 - Recreational visitors (PRoW users) travelling through Locko Park; and
 - Receptors in select location within the urban area of Derby (i.e., Pride Park and the Cemetery)

6.5. Following site survey work, the key receptors are considered to comprise:

- Residents on the western fringes of Spondon (Royal Hill Road);
- Prow users passing the southern boundary of the Site and at short distance to the south-west at select locations between Royal Hill Road and Acorn Way;
- PRow users along footpaths passing the northern boundary of the Site and in close proximity to / approaching from the north; and
- PRow users along footpaths and the bridleway at medium to long distance broadly to the north.

Visual Effects

- 6.6. The following section sets out the main visual impacts which are likely to be generated by the proposed development. This includes reference to the likely scale of effect on specific visual receptors.
- 6.7. Detailed assessment is set out in respect of individual viewpoint locations, set out on the viewpoint photograph sheets (refer to **Figure 6, Viewpoint Photographs**). These viewpoints represent a selection of potential visual receptors in the local landscape context, including where views are potentially available (with reference to the ZTV) and to address a range of receptor types and locations.
- 6.8. The following table summarises the judgements on impact and effect, with additional discussion on visual effects from broader groups of receptors set out in the following section (i.e. placing these specific viewpoint locations in context).

Assessment of Visual Effects

Viewpoint	Sensitivity	Description of change and nature of impact	Magnitude and significance of effects	Magnitude and significance of effects
			Completion	Year 15
1. Views from Royal Hill Road opposite the entrance to Royal Hill Farm	High (Residents)	<p>This view primarily represents residents in properties opposite the Site. While there would also be some road receptors, this is a residential road, however effects on these receptors would be no greater than residents due to sensitivity and the fleeting nature of views. The Site sits directly in the fore of the view, directly beyond the farm access.</p> <p>Existing views comprise the roadside hedge, entrance to the farm, new hedge planting and numerous buildings at the farm complex. Views are quickly foreshortened by successive hedgerows at short distance, and by established trees along the footpath passing the south of the Site.</p> <p>Changes to the view would be at short distance and focus on the removal of a section of the existing roadside hedgerow and creation of the new vehicular main Site access (although the majority would be retained), together with new residential development backing towards the road and defined along the boundary by a new hedgerow replacing the existing visible hedgerow and trees. The nature of the view would alter from paddocks to residential.</p> <p>While the maturation of proposed boundary hedgerows together with structural planting and landscaping in the south-east of the Site would bring beneficial effects, screening would be limited although there is likely to be some softening of views towards development.</p>	<p>Magnitude: Medium to high</p> <p>Significance of Effects: Major Adverse</p>	<p>Magnitude: Medium to high</p> <p>Significance of Effects: Moderate to Major Adverse</p>
2. Views from the PRoW between Acorn Way and Royal Hill Road	High (PRoW users)	<p>Much of the PRoW from Acorn Way is well screened by flanking tall hedgerows with trees, both along the path itself and where it passes alongside properties on West Road. There is a short section of PRoW where the route is elevated and there are views beyond the adjacent hedgerow across the foreground arable land towards and of the Site. The horizon is formed at the middle distance by rising arable and grazed fields divided by hedgerow sections / remnants, scattered trees and fencing. Other visible elements include Springfield Farm buildings,</p>	<p>Magnitude: Medium</p> <p>Significance of Effects: Moderate to Major Adverse</p>	<p>Magnitude: Low to Medium</p> <p>Significance of Effects: Moderate Adverse</p>

		<p>the two communication masts, buildings and earthworks at the covered reservoir compound, and shelters / structures in the paddocks.</p> <p>On completion of the development, new housing would be clearly visible at short distance, replacing grazing and sitting in front of the reservoir compound, extending the settlement edge where this is not currently experienced. The existing gappy hedge sections and fencing would be reinforced with new hedgerow planting creating a continuous hedgerow boundary and some screening of the development. Landscape proposals in the north and south of the Site would be less readily discernible due to the topography, and existing retained and intervening key vegetation, although receptors would perceive tree planting and other habitat enhancements within these areas.</p>		
3. Views looking south-west from the PRoW between Locko Road and NW Spondon, to the north-east of the Site	High (PRoW users)	<p>This viewpoint represents the first opportunity for glimpses of the Site from the footpaths along or approaching the north-west of Spondon.</p> <p>Existing views are well enclosed by vegetation to either side of the path, with a brief opportunity looking south via a field access adjacent to the reservoir compound, narrowed by field hedges to either side. Across ruderal vegetation in the foreground, recent built form at Royal Hill Farm can be seen, and which would be more apparent in winter following annual / perennial vegetation dieback. It is likely that a select number of proposed dwellings would also be seen alongside (and in the context of) the existing building. Consequently, there would be a slight increase in the presence of development within the view at this point along the footpath, although this would be very limited by the narrowed nature of the view. The new boundary hedgerow planting will provide a degree of screening of the new dwellings over time.</p>	<p>Magnitude: Low</p> <p>Significance of Effects: Minor to Moderate Adverse</p>	<p>Magnitude: Low</p> <p>Significance of Effects: Minor Adverse</p>
4. Views looking south from the PRoW between Morley Road and NW Spondon immediately north of the Site	High (PRoW users)	<p>On the approach southwards to the Site, the footpath becomes more elevated as the path follows the rising ground from the Lees Brook valley. The trees and shrubs bordering the reservoir compound and part of the unmanaged hedgerow along the Site's northern boundary become increasingly visible.</p> <p>This viewpoint illustrates the views experienced by public footpath users in closest range of the Site. Beyond vegetation around the south-western corner of the field through which the footpath passes. This is the main focus of the view.</p>	<p>Magnitude: Negligible</p> <p>Significance of Effects: Negligible</p>	<p>Magnitude: Negligible</p> <p>Significance of Effects: Negligible to Minor Beneficial</p>

		Views into the Site itself are not possible, although planting in the northern limits would be visible, further reducing the potential for any views further south including during the winter months. This would also serve to provide additional screening between the footpath and proposed development.		
5. Views looking east south-east from the PRoW north of Spondon Allotments	High (PRoW users)	<p>To the east of Locko Road there is a single public footpath extending north of Spondon's settled edge. North of the allotments, views looking west are typically curtailed by a field hedgerow alongside, however, before the route descends to the Lees Brook there is a brief opportunity for views beyond the hedge of adjacent pasture. As a result of robust vegetation and trees along next field boundary within the view, no more than glimpses of further fields at middle distance, which comprise sloping mixed farming north of the Lees Brook.</p> <p>The Site, its immediate environs, and residential development close to the Site are completely screened from view. Due to the position of the Site relative to the settlement edge (including the reservoir compound) it is considered unlikely that the Site and any components of the proposed development would be visible.</p>	<p>Magnitude: Nil</p> <p>Significance of Effects: None</p>	<p>Magnitude: Nil</p> <p>Significance of Effects: None</p>
6. View looking south from the PRoW from Locko Road to Spondon	High (PRoW users)	<p>This view is principally representative of receptors on the public footpath along its most elevated section of the route where it connects with the bridleway between Acorn Way and Locko Road, and Locko Road itself.</p> <p>From here, fallow land occupies the foreground, which is crossed by pylons and high voltage power lines. The northern edge of Spondon together with some fringe recreational land uses can be seen on the horizon which is formed by the high ground up to which Spondon has been developed, punctuated by field boundary trees. The mid-ground comprises mixed farmland rising from the Lees Brook which is well treed. The Site can be identified by the two communications masts trees along the northern boundary, however the Site itself is not visible.</p> <p>The extent of change within views is likely to be limited to no more than structural planting along and in very close proximity to the northern boundary.</p> <p>It is worth noting that from along the bridleway, southerly views are screened by a field hedge with the exception of a gap onto the footpath. While views may be similar to this viewpoint from Locko Road,</p>	<p>Magnitude: Negligible</p> <p>Significance of Effects: Negligible</p>	<p>Magnitude: Nil</p> <p>Significance of Effects: Negligible</p>

		screening is relatively consistent and opportunities are intermittent. Combined with the fleeting nature of these receptors, change is unlikely to be discerned, but if identifiable would be brief and no greater than those reported for footpath users.		
7. View looking south-south-east from the PRoW network east of Chaddesden	High (PRoW users)	<p>This view is representative of both public footpath users and receptors along the Morley Bridleway. The viewpoint is situated at the crossing point of the two where lower elevation or proximate vegetation does not limit southerly views.</p> <p>Receptors look across adjacent pasture, bound by established vegetation along Acorn Way and a watercourse leading to Lees Brook, as well as other field hedgerows and fencing. Beyond this short distance vegetation, landform rises beyond the Lees Brook towards high ground (which defines the horizon) at the northern-most end of the Site, where the two communications masts are visible.</p> <p>As the northern portion of the Site is given over entirely to green infrastructure proposals, the extent of change within views is likely to be limited to no more than structural planting along and in very close proximity to the northern boundary.</p> <p>Due to the nature of the intervening topography and degree of vegetative containment around the park it is unlikely that there would be any views of the development proposals even during the winter months.</p>	Magnitude: Negligible Significance of Effects: Negligible	Magnitude: Nil Significance of Effects: Negligible
8. View looking south-west from within Locko Park	High (PRoW users)	<p>The viewpoint is representative of typical views experienced from within Locko Park, encompassing PRoW users and recreational visitors passing through the RPG.</p> <p>Foreground is occupied by meadow / pasture, framed by scattered parkland trees, woodland / tree belts and rising ground directly south on the edge of the Park and beyond.</p> <p>Views from within the Park are therefore largely contained to the Park itself. The Site is not identifiable.</p>	Magnitude: Nil Significance of Effects: None	Magnitude: Nil Significance of Effects: None
9. View looking south-west from the	Medium	View is representative of select residents along Morley Road looking south-east across the adjoining farmland landscape, and occasional fleeting view for road users. This is not typical of the visual experience	Magnitude: Nil	Magnitude: Nil

suburban edge of Derby at Oakwood	(Road user) High (Residents)	<p>along the eastern suburban edge of Derby as this is typically well screened by hedgerows and tree lines along Acorn Way, leading into Morley Road. This viewpoint is located at a field access at the gap in this vegetation, which occur very intermittently along the full length of this route.</p> <p>From here, large-scale field compartments crossed by pylons with rough grassland can be seen in the foreground, and (buildings associated with) a football academy and surrounding woodland beyond.</p> <p>Neither Spondon nor the Site can be discerned within the view due to the screening effects of mid-distance vegetation. A marginal horizon is formed by the very long-distance rising ground on the opposite side of the Derwent Valley.</p> <p>Due to distance and the incidence of successive vegetated boundaries between the viewpoint and the Site it is unlikely that there would be any views of the development proposals even during the winter months.</p>	Significance of Effects: None	Significance of Effects: None
10. View looking south from Derby Road, east of Chaddesden Common	Medium (Road user)	<p>A long-distance view towards the Site from an area of locally highest ground near the north-east of the suburban edge of Derby. This road is a local route from Chaddesden to the settlement of West Hallam.</p> <p>Views along Derby Road are typically restricted by roadside hedgerows, but there are occasional gaps at field access points. The foreground is dominated by medium to large scale arable farmland, beyond which successive field boundary vegetation and woodland to the west of Locko Park serves to screen much of the middle- and long-distance ground on gently falling landform to the south and south-east. Consequently, neither Spondon nor the Site can be discerned within the view. The horizon is formed by the very long distance rising ground on the opposite side of the Derwent Valley.</p> <p>Due to distance and the incidence of successive vegetated boundaries between the viewpoint and the Site it is unlikely that there would be any views of the development proposals even during the winter months.</p>	<p>Magnitude: Nil</p> <p>Significance of Effects: None</p>	<p>Magnitude: Nil</p> <p>Significance of Effects: None</p>

Summary of Visual Effects

- 6.9. Likely visual impacts associated with the proposed development are limited to a range of receptors in the immediate and local context of the site. These are considered to comprise:
- Existing residential receptors (circa 15) located immediately east along Royal Hill Road. A small number of residents (around 6) would have a direct view of the proposed built form of residential dwellings and / or the Site access. A further 6 would back towards the Site at short distance or have oblique views including existing property at least partially obscuring the view of the Site. Mitigation is incorporated including a new hedgerow along the eastern boundary, avenue planting along the access road, and open space along the southern boundary, towards which 3 properties would front.
 - Users of the PRoW between Acorn Way and Royal Hill Road passing to the south of the Site: these receptors would experience views looking primarily across the western portion of the Site on the approach at short distance, where elevation offers brief opportunities for views into the Site beyond southern boundary vegetation. These would focus on open space in the south-west and adjoining new residences in the western half of the development envelope. Passing the Site itself, views of the Site would be heavily screened by retained vegetation together with new planting in the south, even in winter. Glimpses would be possible via pedestrian connection points into the Site, where housing would be briefly visible beyond (and fronting onto) green space and planting.
 - Users of the PRoW between Locko Road and Morley Road close to the northern extents of the Site: views of the proposed development comprise a couple of brief glimpses along this route via a gap in vegetation to the north-east, and close to the northern corner of the Site which vary depending on position. Opportunity for views rapidly disappears away from the Site due to topography or existing settlement. Glimpses can comprise partial restricted views of new housing seen in the context of existing buildings at Royal Hill Farm, or focus upon the open space and structural landscape proposals in the north of the Site and along its northern boundary. Consequently, it is considered that these receptors would briefly experience both adverse and beneficial changes to their views.
 - PRoW receptors along limited sections of public paths at elevated locations: views from bridleways and footpaths that are unimpeded by intervening vegetation in the landscape or by hedgerows / trees along their routes are limited, however, there are a select number of locations where views towards the Site are possible. From here, change to views is considered to be limited to additional structural landscape elements within the north-most extents of the Site.
- 6.10. In terms of the context for views, and the implications for judging the degree of change (or magnitude of impact) the geographical extent of potential views to the Site and proposed development is very limited.
- 6.11. The proposed development would result in only limited effects on local visual amenity, with notable effects limited to locations immediately adjacent to the Site, and approaching at short distance.

- 6.12. This is demonstrated by reference to the representative viewpoints, where those assessed as having the highest significance of effect are effectively from the high sensitivity receptor groups of immediately proximate residents and footpath users passing and approaching at short distance. Elsewhere, the proposed development would generally not be visible or marginally perceived.
- 6.13. Furthermore, the visual assessment demonstrates the positive influence of mitigation that is inherent in the proposed development, with Year 1 and Year 15 assessments demonstrating a reduction in impact and effect, particularly from the north where views are not considered to be subject to impacts greater than Negligible in any case. The ability to successfully mitigate potential impacts is a key consideration in respect of potential visual effects.
- 6.14. For the existing residential properties located along Royal Hill Road, there would be a considerable change in views that look directly into the Site (i.e. subject to which room views are from and degree of localised screening on/adjacent to the properties). However, the proposed development seeks to provide mitigation that will soften views over time.
- 6.15. Acorn Way is enclosed by established vegetation to both sides, which forms an effective screen in terms of views looking west. Sections are also in a slight cutting, the embankment also adding to the visual containment. Consequently, there are essentially no views towards the Site: while there are very brief glimpses of the landscape to the east via field accesses, these are infrequent, and within which it is not considered that the proposed development would be readily identified due to distance, intervening vegetation and the rolling landform. Acorn Way also serves to screen views from the edge of Derby. Where residents are situated further north, intervening woodland / tree cover and the high ground immediately north of the Site together with the distance are likely to screen any views of proposals within the Site.
- 6.16. For PRoW receptors to the north at medium to long-distance, in most elevated and visually unimpeded sections of these routes glimpsed views of the northern limits of the Site from select locations would focus primarily upon the structural landscape elements of the scheme which represent positive enhancement to the existing green infrastructure of the Site. The significance of effects is considered to be no greater than Negligible.
- 6.17. Where possible, the nature of change to views as experienced from local routes at a similar distance (such as Locko Road between the bridleway connection and Locko Park PRoW) would be similar to those experienced by PRoW users, however, opportunities are fleeting and occasional and receptors may not perceive change within the north of the Site. Other routes further north – although more elevated – are typically flanked by roadside hedgerows, and with increasing distance is the increasing incidence of intervening vegetation obscuring direct views of the north of the Site.
- 6.18. PRoWs extending from the north of Spondon (to the north-east of the Site) have a very limited if any visual relationship with the Site and its immediate setting. Either Spondon itself, settlement edge land uses (such as the allotments), field boundary vegetation or woodland obscures views to a greater or lesser extent, with the rolling topography also a contributing factor. Therefore, in these longer-distance, south-westward looking views towards the Site, the proposed development is unlikely to be visible.
- 6.19. With regards to receptors near Derby centre (including the cemetery), immediately proximate vegetation would enclose views, as would existing large-scale built form which would be the focus within views. It is not considered that the Site would be visible, or easily perceived in occasional glimpses. The focus of views is on built form in Derby itself.

7. Summary and Conclusions

Overview

- 7.1. Pegasus Group has been instructed by Miller Homes (the applicant) to undertake a Landscape and Visual Impact Assessment (LVIA) in relation to the proposed development of land off Royal Hill Road, Spondon (hereafter referred to as the 'Site').
- 7.2. The LVIA has been prepared to address the potential landscape and visual impacts of an outline application, with all matters reserved except for access, for the development of up to 90 residential dwellings, with associated internal vehicular routes and pedestrian links, open space, and a scheme of strategic landscaping / green infrastructure including an area of community orchard. A single vehicular access is to be taken off Royal Hill Road towards the southern end of the eastern boundary of the Site.

Site Context

- 7.3. The Site consists of 4.51 hectares (Ha) of land situated adjoining the western edge of Spondon, a suburb of Derby and just over 3km from city centre to the west. Nottingham lies to the east.
- 7.4. It occupies four rectilinear agricultural fields that are currently grazed. To the east of the Site is the wider settled area of Spondon, its urban / rural western edge continuing to the south. Boundaries are defined by hedgerows (or gappy hedgerow sections) or post and rail fencing, with scattered hedgerow trees. Some fields are subdivided into paddocks.
- 7.5. The surrounding landscape context of the Site is influenced by the transition between the settlement edge of Spondon and Derby, and the wider landscape primarily to the north. To the west is a wide tract of mixed agricultural land and a vegetated nature reserve between Spondon and the wider urban area of Derby. To the north is further agricultural land surrounding Derby. Land is undulating but falls overall from the north to south into the Derwent Valley. The Site slopes from high ground to the north to south, before the land rises again and rolls down to the valley.

Landscape Character

- 7.6. The LVIA has considered the published landscape character guidance applicable to the Site from National to Local level as part of the analysis of the context of the Site and the study area. The evaluation identified that the Site's immediate context shares a number of characteristics common across the referenced landscape character assessments at their most detailed levels.
- 7.7. At a National Level, the Site lies just within the boundary of the 'Nottinghamshire, Derbyshire and Yorkshire Coalfields', which rises above the adjoining broadly defined lower-lying washlands of the River Trent and its various tributaries including the Derwent.
- 7.8. At a regional level, the floodplain valleys are more specifically defined as they occur passing through adjacent character areas. The Site sits in one of the units of the 'Village Farmlands' LCT which forms part of a wider group of Village Farmland types, and which are frequently identified along the courses of the rivers flowing through the region and are noted as being typically dissected by stream valleys; as evidenced in the Site's context.

- 7.9. At the county level, the Site lies within a 'Lowland Village Farmlands' LCT that is associated with the 'Trent Valley Washlands' character area rather than the 'Coalfields' landscapes. While the characteristics and description of the LCT make reference to the gravel terraces and floodplain, they focus on the adjoining farmland on the valley slopes. The Study Area also includes the 'Plateau Estate Farmlands' LCT to the north-east, which form part of the Yorkshire, Nottinghamshire and Derbyshire Coalfield Character Area.
- 7.10. Overall, the scheme seeks to respond to the existing grain and pattern of the landscape relative to its scale, as well as to the characteristics of the landscape at the most detailed level in published guidance.
- 7.11. Changes to the physical landscape resource would primarily comprise the loss of paddocks and some sections of hedgerow to accommodate the introduction of new housing, public open space, additional structural landscape planting, sustainable drainage earthworks, habitat creation and orchard planting.
- 7.12. The character of the Site and its immediate context would alter from settlement fringe grazing to a residential one with public open space and structural landscaping, noting that just over half the Site would comprise green infrastructure. It would retain many of (or in some case enhance) its key characteristic features such as the inherent sloping / undulating topography, network of hedgerows with hedgerow trees, pattern of locally dense watercourse trees, largely absent woodland but presence of copses.
- 7.13. The perception of change in landscape character terms would extend only a very limited distance beyond the Site due to both physical and visual containment of the Site within the local landscape. Consequently, it is considered that development proposals within the Site would not result in any impacts upon the Plateau Estate Farmlands LCT. The significance of effects over time as the landscape framework has established and matures, it is anticipated that effects would be of no greater than Minor Adverse significance on balance, and Minor to Moderate Adverse significance upon the Site and immediate context.

Visual Resources

- 7.14. The scope of visibility of the Site is considered primarily to be restricted by settlement on the valley slopes to the east and west, as well as within the valley to the south. Elevated land to the north provides the opportunity for long-distance views towards the Site, where the undulating nature of the landform and intervening vegetation allows.
- 7.15. Based on the ZTV and informed by subsequent site survey and observations from the field work, the visual envelope is broadly defined as follows:
- East: by the developed edge of Spondon
 - North-east: up to Spondon Wood and land around Locko Park
 - North: High ground east of Chaddesden (broadly demarcated by Derby Road)
 - West: by the settled edge of Derby
 - South: by the Derwent Valley and development along the A6005

- 7.16. Additionally, the LVIA considered potential views from beyond the visual envelope, namely select areas within the wider developed extents of Derby to the south-west, however no perceived change to these receptors' views were predicted.
- 7.17. Following site survey work, the key receptors were considered to comprise:
- Residents on the western fringes of Spondon (Royal Hill Road);
 - Prow users passing the southern boundary of the Site and at short distance to the south-west at select locations between Royal Hill Road and Acorn Way;
 - PRow users along footpaths passing the northern boundary of the Site and in close proximity to / approaching from the north; and
 - PRow users along footpaths and the bridleway at medium to long distance broadly to the north
- 7.18. The proposed development would result in only limited effects on visual amenity, with notable effects limited to locations immediately adjacent to the Site to the north, east and south, and approaching at short distance from the north and south.
- 7.19. The visual assessment demonstrates the positive influence of mitigation that is inherent in the proposed development, with Year 1 and Year 15 assessments demonstrating a reduction in impact and effect, particularly from the north where views are not considered to be subject to impacts greater than Negligible in any case. The ability to successfully mitigate potential impacts is a key consideration in respect of potential visual effects.
- 7.20. For the existing residential properties located along Royal Hill Road, there would be a considerable change to views that look directly into the Site, as receptors would see new housing at short distance beyond the existing farm access and a new boundary hedge replacing foreground paddocks.
- 7.21. Users of the PRow between Acorn Way and Royal Hill Road passing to the south of the Site would be largely screened but would have a limited opportunity for views of open space in the south-west of the Site and adjoining new residences in the western half of the development envelope. Passing the Site itself, views of the Site would be heavily screened by retained vegetation together with new planting in the south, even in winter. Glimpses would be possible via pedestrian connection points into the Site, where housing would be briefly visible beyond (and fronting onto) green space and planting.
- 7.22. Users of the PRow between Locko Road and Morley Road close to the northern extents of the Site would have brief glimpse a partially restricted view of new housing seen in the context of existing buildings at Royal Hill Farm. Just to the west, views would focus on the landscape proposals close to the northern boundary. Consequently, these receptors would briefly experience both adverse and beneficial impacts in their views.

Conclusion

- 7.23. Overall, it is considered that the Illustrative Layout for the proposed development incorporates a robust and extensive landscape mitigation strategy included as an inherent part of the scheme. This will avoid and minimise potential adverse effects. Furthermore, in the context of the very limited and highly localised landscape and visual effects.



Appendix A: LVIA Methodology



Appendix B: Green Belt Review

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