

6. Landscape and Visual Amenity

6.1. Introduction

- 6.1.1. Pegasus Group has been instructed by the Applicant to undertake a landscape and visual impact assessment (LVIA) in relation to the Proposed Development of land at Toton West, Toton (referred to as the 'Site').
- 6.1.2. The location of the Site, and a full description of the development proposals, are provided within chapters 3 and 4 of this ES. The detail is not repeated extensively within this chapter, however it is necessary to set out some detail within the chapter as it forms part of the comprehensive approach to the LVIA.
- 6.1.3. 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 and tourists) and road users.
- 6.1.4. 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) (GLVIA3). The detailed methodology used is set out in **Appendix 6.1: LVIA Methodology**.
- 6.1.5. The author of this chapter has 20 years' experience as a Landscape Architect, specialising in LVIA. They are also a Chartered Member of the Landscape Institute.
- 6.1.6. This chapter aims to identify and describe the effects that are likely to occur as a consequence of the Proposed Development, 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.

6.2. Assessment Approach

Methodology

- 6.2.1. The approach and methodology used for this chapter has been developed in accordance with the guidance in the following documents:
- Landscape Institute and Institute of Environmental Management and Assessment (April 2013) Guidelines for Landscape and Visual Impact Assessment 3rd Edition;
 - Natural England (October 2014) An Approach to Landscape Character Assessment;
 - Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals;
 - Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations; and

Landscape and Visual Amenity

- Landscape Institute (2024), Technical Guidance Note LITGN-2024-01, Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3).

6.2.2. The overall approach to the identification and assessment of landscape and visual effects is summarised as follows:

- Determining the scope of the assessment;
- Collating baseline information for landscape and visual receptors, including completing desk study research and undertaking field-based survey work;
- Review the Proposed Development and identify and describe the likely impacts of the Proposed Development (enabling specific judgments to be made on sensitivity of landscape and visual receptors);
- Establish the sensitivity of landscape and visual receptors (balancing judgments on susceptibility and value);
- Determine the magnitude of impacts (balancing judgments on size / scale, duration and reversibility);
- The assessment of the likely significance of landscape and visual effects through a balanced approach and clear description of judgments on sensitivity and magnitude; and
- The identification of measures to avoid or remedy impacts and the subsequent re-assessment of likely effects.

Assessment of Significance

6.2.3. Significance can only be defined in relation to each development and its specific location, and in landscape and visual terms there are no definitive rules as to what constitutes a significant effect.

6.2.4. The GLVIA3 state that, in relation to the EIA Regulations:

"emphasis is on the identification of likely significant environmental effects. This should embrace all types of effect and includes for example those that are positive/beneficial and negative/adverse... Identifying significant effects stresses the need for an approach that is in proportion to the scale of the project and the nature of its likely effects."

6.2.5. For the purposes of this chapter, in relation to the Site and Proposed Development, effects are considered to be 'significant' where these are judged to be 'moderate to major' or 'major' (either adverse or beneficial).

6.2.6. However, it is important to note that there remains an element of professional judgement when drawing together an 'overall judgment' on effects and that one single 'significant effect' might not lead to landscape and visual effects being significant on balance (for example, one viewpoint subject of a significant effect may not equate to visual effects being significant overall).

Legislative and Policy Framework

- 6.2.7. 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

- 6.2.8. 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."

- 6.2.9. 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

- 6.2.10. The revised National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government (MHCLG) in December 2024, 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.
- 6.2.11. 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.
- 6.2.12. In relation to landscape and visual matters, achieving well-designed (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 place.
- 6.2.13. 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 change."*
- 6.2.14. 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'*.
- 6.2.15. The NPPF notes the importance that designs 'evolve' in response to local issues and to the views of the community.

Landscape and Visual Amenity

Planning Practice Guidance

- 6.2.16. 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.
- 6.2.17. The PPG for the 'Natural Environment' was updated in February 2024 and addresses agricultural land, green infrastructure, biodiversity, and landscape. 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."*
- 6.2.18. 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'*.
- 6.2.19. 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."*
- 6.2.20. 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.
- 6.2.21. 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 assessment responds fully to the requirement of the PPG.

The Local Plan

- 6.2.22. The Broxtowe Borough, Gedling Borough and Nottingham City Council Aligned Core Strategies Part 1 Local Plan was adopted in September 2014. This document sets out an aligned set of policies and principles on how the city region can develop between 2011 and 2028.
- 6.2.23. The Broxtowe Borough Council (BCC) Part 2 Local Plan 2018–2028, adopted in October 2019, considers the long-term vision and objectives up to the year 2028, as well as containing policies for delivering these objectives.
- 6.2.24. The following table sets out policies from both documents relevant to landscape and visual matters.

Table 6.1: Summary of relevant adopted development plan policies

Policy Ref.	Policy Summary
Aligned Core Strategies Part 1 Local Plan	
Policy 2: The Spatial Strategy	The Site lies within a mixed-use strategic allocation, referred to as 'Land in the Vicinity of the proposed HS2 Station at Toton', comprising 73 Ha of land east and west of Toton Lane (B6003).
Policy 10: Design and Enhancing Local Identity	<i>1. All new development should be designed to:</i> <i>a) make a positive contribution to the public realm and sense of place;</i> <i>b) create an attractive, safe, inclusive and healthy environment;</i> <i>c) reinforce valued local characteristics;</i> <i>d) be adaptable to meet changing needs of occupiers and the effects of climate change; and</i> <i>e) reflect the need to reduce the dominance of motor vehicles.</i> <i>4. Development must have regard to the local context including valued landscape/ townscape characteristics, and be designed in a way that conserves locally and nationally important heritage assets and preserves or enhances their settings.</i> <i>5. Outside of settlements, new development should protect, conserve or where appropriate, enhance landscape character. Proposals will be assessed with reference to the Greater Nottingham Landscape Character Assessment.</i>
Policy 16: Green Infrastructure, Parks and Open Space	<i>1. A strategic approach to the delivery, protection and enhancement of Green Infrastructure will be taken, through the establishment of a network of regional and sub-regional Green Infrastructure corridors and assets (as shown on the Key Diagram), particularly focusing on links between Nottingham and Derby, together with corridors and assets of a more local level which will be defined through part 2 Local Plans.</i> <i>2. The approach will require:</i> <i>e) Landscape Character is protected, conserved or enhanced where appropriate in line with the recommendations of the Greater Nottingham Landscape Character Assessment. Criteria for the assessment of proposals and any areas of locally valued landscape requiring additional protection will be included in part 2 Local Plans.</i> <i>3. New or enhanced Green Infrastructure corridors and assets should be as inclusive as possible, multifunctional and look to make provision for more than one of the following:</i> <i>a) access to employment and leisure facilities and to Green Infrastructure corridors or assets and the countryside;</i>

Landscape and Visual Amenity

Policy Ref.	Policy Summary
	<i>b) physical activity and wellbeing opportunities for local residents such as formal sports provision;</i> <i>c) educational resource for local residents;</i> <i>d) biodiversity opportunities;</i> <i>e) tackling and adapting to climate change;</i> <i>f) enhancement of landscape character;</i> <i>g) protection or enhancement of heritage assets; and</i> <i>h) opportunities for sustainable leisure and tourism.</i>
Part 2 Local Plan 2018–2028	
Policy 28: Green Infrastructure Assets	<i>1. Development proposals which are likely to lead to increased use of any of the Green Infrastructure Assets listed below, as shown on the Policies Map, will be required to take reasonable opportunities to enhance the Green Infrastructure Asset(s). These Green Infrastructure Assets are:</i> <i>a) Green Infrastructure Corridors (not shown on the Policies Map);</i> <i>b) Playing Pitches;</i> <i>c) Informal Open Spaces i.e. 'natural and semi-natural green space' and 'amenity green space';</i> <i>d) Allotments;</i> <i>e) Recreational Routes;</i> <i>f) Nature Reserves;</i> <i>g) Golf Courses (Beeston Fields and Chilwell Manor);</i> <i>h) A mix of Informal Open Spaces and flood mitigation measures (land off Thorn Drive, Newthorpe); and</i> <i>i) Prominent Areas for Special Protection (Bramcote Hills and Bramcote Ridge; Burnt Hill, Bramcote; Catstone Hill Ridge, Strelley; Stapleford Hill; and Windmill Hill, Stapleford).</i> <i>2. In all cases listed in part 1, and in the case of school playing fields, permission will not be granted for development that results in any harm or loss to the Green Infrastructure Asset, unless the benefits of development are clearly shown to outweigh the harm.</i>
Policy 30: Landscape	<i>All developments within, or affecting the setting of, the local landscape character areas listed below should make a positive contribution to the quality and local distinctiveness of the landscape. They should therefore be consistent with the 'landscape actions' for the area concerned, as set out in the Greater Nottingham Landscape Character Assessment and in Appendix 7 of this Plan.</i>

- 6.2.25. The Site lies outside the Nottingham and Derby Green Belt, within land defined as a 'Mixed Use Allocation' within the Part 2 Local Plan Policies Map.

Greater Nottingham Strategic Plan

- 6.2.26. The Aligned Core Strategy is currently being reviewed and this will result in the production of the Greater Nottingham Strategic Plan. The consultation draft has been published, with the consultation period ending 16th December 2024.

Other Relevant Strategies, Guidelines or Documents

Toton and Chetwynd Barracks Supplementary Planning Document (SPD) (February 2013)

- 6.2.27. Broxtowe Borough Council prepared the Toton and Chetwynd Barracks Strategic Masterplan SPD in 2013 to serve as the 'Strategic Masterplan' referred to within Policy 3.2 of Part Two of the Local Plan. This covered the allocation that extends into the south of the Site known as 'Land in the vicinity of the HS2 Station at Toton'.

- 6.2.28. The SPD recognises the opportunity created by the allocation and seeks to ensure a comprehensive approach is taken to development across both the Toton allocation and a secondary allocation at Chetwynd Barracks. The key development requirements outlined in the SPD are extensive, the requirements set out in relation to Green Infrastructure, Open Space and Sports Pitches include:

- *"Retain and enhance Green Infrastructure corridors around the eastern and northern areas of the site and create attractive links between open spaces.*
- *Retain and enhance the existing play fields and sport facilities (including the pavilion) on the south-eastern corner of the site.*
- *Retain existing mature trees and grass verges and incorporate these into a boulevard approach to the street scene.*
- *Retain existing Hobgoblin Wood.*
- *Ensure that management of woodland, green infrastructure and open spaces is secured in perpetuity.*
- *Provide on-site sustainable drainage system."*

Toton and Chilwell Neighborhood Plan (2020-2040)

- 6.2.29. The plan provides a vision for the future of the area and sets out clear planning policies in regards to the future vision. The plan identifies four Character Areas which make up the plan area, the Site is located within the 'Toton and Chilwell Green Fringe'.

- 6.2.30. Its 'key features' are described as:

"The Green Fringe is an important green corridor in the Area. Public open space is very limited as the area comprises largely agricultural fields. However, the extensive network of formal and informal pedestrian and cycle routes allows a high level of access including a section of the Erewash Valley Trail. In addition, there is a good degree of relic rural character here within this otherwise largely suburban area."

Landscape and Visual Amenity

6.2.31. The key characteristics of the Green Fringe area include:

- *“Green corridors, which are part of the Green Fringe, form Green corridors, which are part of the Green Fringe, form a significant component of the wider green infrastructure network linking Bramcote, Beeston, Attenborough and the River Trent.*
- *Arable fields within the Green Belt designation (north of the tram line) and separating built-up areas to the west of the city.*
- *A good deal of openness, with medium-scale fields bounded by hedgerows and hedgerow trees.*
- *Undulating landform which provides views to the south from elevated areas, particularly the northern edge at Baulk Lane.*
- *Mature trees along the B6003 Stapleford Lane, especially along Spinney Crescent and the service road on the east side of the Lane.”*

6.2.32. Neighbourhood Plan Policies of relevance to the Site include Policy ENVO3 which has the objective to create new multifunctional blue / green infrastructure to establish good linkage between larger areas of green space, through:

1. *Major development should provide green and blue infrastructure which could include provision for amenity green spaces, community gardens, allotments and children’s play spaces, as well as new accessible natural green space.*
2. *Major development should take opportunities to incorporate and enhance connectivity between different ecological assets including Local Nature Reserves, Sites of Special Scientific Interest, Local Wildlife Sites and other green spaces including woodland, and could include:*
 - a. *an east-west accessible natural green space along the southern boundary of the SLG stretching from Northfield Crescent to the top of Toton Bank which follows Secondary Corridor ‘2.23 Toton Sidings to Chilwell’ [EB: Broxtowe Green Infrastructure Strategy para 2.23];*
 - b. *accessible natural green space linking Northfield Crescent to Hobgoblin Wood;*
 - c. *a north-south accessible natural green space following the existing public footpath from Baulk Lane to Northfield Crescent;*
 - d. *an east-west accessible natural green space linking Hobgoblin Wood and the Memorial Garden to Stapleford Lane;*
 - e. *a north-south accessible natural green space linking Northfield Crescent to the old wooded quarry (site centroid: SK499353) on the west of the barracks;*
 - f. *accessible natural green space connecting the Memorial Garden to Sherman Drive green space via the Chetwynd Barracks playing fields and a new pathway following the culverted stream along the southern boundary of the Barracks;*
 - g. *other opportunities to extend the mosaic of woodland, scrub and grassland into adjacent areas.*

Broxtowe Borough Council Green Infrastructure Strategy 2015–2030

6.2.33. The Broxtowe Borough Council Green Infrastructure Strategy sets out a strategic approach to deliver, protect and enhance Green Infrastructure in the borough. The key principles of the strategy include:

- *Safeguard and enhance the core environmental Green Infrastructure networks within Broxtowe.*
- *Enhance existing and create new Green Infrastructure to improve human connections with the natural environment.*
- *Provide a multi-functional network of green spaces for communities and wildlife which will deliver economic, social and environmental benefits.*

6.2.34. The strategy identifies a number of enhancement opportunities in relation to development at Toton Lane, which include the creation of grassland habitats and enhancement of natural spaces.

Landscape and Visual Analysis of Potential Development Sites (BDC January 2017)

6.2.35. In June 2016 Broxtowe Borough Council appointed AECOM to Undertake Landscape and Visual Analysis¹ (LVA) of potential development sites in Broxtowe Borough Council. The LVAs have been used along with other information to make decisions about which sites should be allocated for development in the second part to the Local Plan. The executive summary notes:

“The LVAs assess 44 sites which are considered ‘reasonable alternatives’ for allocation for both their impact on the landscape and their visual impact. This has resulted in a score being applied for both landscape and visual sensitivity; this is then combined to give an overall score of sensitivity. Equal weighting has been given to landscape and visual sensitivity and the elements of susceptibility and value which are combined to establish them. On a national scale, within Broxtowe there is a low landscape quality owing to the limited number of national designations. The landscape tends to be only of local significance within the borough, which implies that sites with the highest scores might not be considered to have such a high sensitivity in other parts of the country.”

6.2.36. The Site falls under potential development area ‘LSO3: West of Toton Lane’. This assessment noted:

‘The site is a series of arable fields and the site of a school on land lying between the settlements of Toton and Stapleford, it is mentioned as the agricultural setting of the nearby Sandiacre Lock Conservation Area in the conservation area appraisal. There is considerable human influence within the study area, which is reflected in the low landscape sensitivity to change. There is a medium visual sensitivity, which is partially as a result of the site’s role as the setting to the Sandiacre Lock Conservation Area, but also stems from its role as part of the visual amenity for recreational receptors. The site is crossed by a PRoW, which, along with the large local population, also factors into the visual sensitivity.’

¹ AECOM, 2017, Landscape and Visual Analysis of Potential Development Sites – Broxtowe Borough Council.

Landscape and Visual Amenity

Scoping Criteria

- 6.2.37. The Site comprises part of a mixed use allocated site as defined within Broxtowe's Part 2 Local Plan (Policy 3.2) and identified as 'Toton (Strategic Location for Growth): 500-800 homes'
- 6.2.38. The proposed development on the Site has not been subjected to a formal scoping process, with the EIA instead following the scope of the ES associated with the separate and independent Land at Toton North planning application, the scoping request for which having been submitted to BBC on 13th September 2024 and BBC's Scoping Opinion received on 22nd October 2024. The Scoping Report and Opinion are included at **Appendix 2.1**.
- 6.2.39. The LVIA addresses the issues relevant to landscape and visual matters raised by the consultee bodies in response to the scoping report. Of particular relevance were the production of an LVIA in line with industry best practice, and the potential for impacts upon the setting of heritage assets. These have been addressed as follows:
- A detailed methodology has been applied to the assessment of impacts on landscape character and visual resources, based on the guidance in the 'Guidelines for Landscape and Visual Impact Assessment' third edition, published jointly by the Landscape Institute (LI) and IEMA in 2013, and reflects the various technical guidance notes issued by the LI. The methodology is included at **Appendix 6.1**.
 - The scope of the visual assessment includes the consideration of impacts upon visual receptors within the Bramcote Conservation Area.

Limitations to the Assessment

- 6.2.40. This chapter has been prepared with the following known limitations:
- The Proposed Development is as illustrated on the Parameter Plan (**Figure 4.1**) and the assessment presented within this chapter is based on those principles and development parameters.
 - During the baseline survey, there were some inaccessible areas (such as private land, commercial premises and residential buildings). In these instances, professional judgement has been used to approximate the likely views from these locations.
 - For mitigation, growth rates of native tree and shrub planting are estimated at 450mm height per year (6.75m after 15 years post completion) added to planting stock of 1.25m (whips / feathered stock) to give a height of 8m at year 15. This is considered a conservative estimate. Through detailed design there is scope to plant larger stock at the outset; furthermore, it would be best practice to specify some diversity of stock sizes to a planting mix.
- 6.2.41. Within the limitations identified, the information on the Proposed Development and baseline information is considered sufficient to undertake a robust assessment of landscape and visual effects for the purposes of this ES.

6.3. Baseline Conditions

- 6.3.1. The following section describes the Site, its context and 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.

Physical Landscape Resource

Site Description and Context

- 6.3.2. The Site is located on the northern settled edge of Toton; a south-westerly suburb of the city of Nottingham), close to the boundary between Nottinghamshire and Derbyshire. The Site is bound to the east by Stapleford Lane (B6003) and to the west by Toton traction maintenance depot and freight yard ('Toton Sidings') and associated rail infrastructure. Further arable land lies directly to the north.
- 6.3.3. The Site comprises two field parcels adjoining the urban edge and the majority of a third extending to the north-west, all in arable use. These are broadly rectilinear in shape, although the largest (occupying the central and eastern portions of the Site) is irregular in form; likely as a result of historic field rationalisation. Consequently, internal features are limited to a ditch between the western and north-western field parcels, and two pylons with overhead powerlines.
- 6.3.4. The Site boundaries themselves are defined by trees and scrub to the west between the Site and the Toton Sidings, Toton to the south (in part comprising a field hedgerow and small linear woodland block at the western end of the residential edge), the B6003 (Stapleford Lane) to the east, the wooded compound of an electricity substation set into the north-east corner, and a hedgerow flanked on the internal side by a ditch along much of the north: where not defined by a tree belt, the north-western section is open to the remainder of the field parcel not occupied by the Site. Bessell Lane Farm sits at the northern corner of the Site.
- 6.3.5. The surrounding area is characterised by suburban settlement associated with the wider south-western Nottingham city fringes within which the Site sits, together with two river corridors, the A52 trunk road between Nottingham and Derby, and the M1 (passing north-south immediately west of Sandiacre). To the west, beyond Toton Sidings and River Erewash corridor and Erewash Canal is Sandiacre; just over the county border into Derbyshire; to the east of the B6003 lies Toton and Chilwell, and to the north is Stapleford.
- 6.3.6. The wider landscape to the west beyond the M1 Motorway and north largely comprises open countryside with scattered towns and villages between Nottingham and Derby.

Land Use and Transport Patterns

- 6.3.7. The Site is currently in arable use, and forms part of a pocket of agricultural land set within – and broadly enclosed by – suburban built form and infrastructure. Overhead electric cables run south west – north east across the Site toward the substation adjoining the north east boundary. The immediate context to the north comprises further small to medium agricultural field parcels, mainly in arable use.
- 6.3.8. Beyond this pocket of farmland; including the Site; are the suburbs of Toton (directly to the south and the south-east) and Chilwell (to the east, beyond the B6003). The northern settled extents of the town of Long Eaton directly adjoin the west of Toton Sidings and the railway lines, with residential development associated with the town of Stapleford directly beyond the A52

Landscape and Visual Amenity

(Brian Clough Way) to the north. To the north-east between the B6003 and Chilwell lies a swathe of farmland divided into fields of varying scale, together with the Toton Lane tram stop, tramline and Park & Ride.

- 6.3.9. The A52 passing to the north of the Site has an interchange with the M1 at the motorway's Junction 25 approximately 1.5km west of the Site. Other roads in the vicinity are predominantly local routes and minor roads serving the surrounding residential area.
- 6.3.10. The wider landscape to the west beyond the broader settlement areas associated with the south-western urban fringes of Nottingham and the M1 is largely open countryside with some hamlets and large villages.

Topography and Landform

- 6.3.11. Land within the Site slopes generally in a south-east to north-west direction. The topography of the Site falls from around 66m Above Ordnance Datum (AOD) to just under 40m AOD. The highest point is at the eastern end of the southern boundary, with lowest ground into the north-west corner of the Site. A ditch along the northern boundary, crossing the Site and joining the west boundary marks the gently rolling landform within and adjoining the Site to the north.
- 6.3.12. Beyond the Site to the west, the landform continues to fall toward the River Erewash at short distance to around 35m AOD; beyond which the land rises again on the opposite side of the river valley beyond Sandiacre. Sections of Brian Clough Way (A52) which passes to the north of the Site is – in places – within slight cuttings, and on an embankment over Toton Sidings to the north-west. The topographical nature of eastern valley slopes north of the A52 occupied by Stapleford and beyond is undulating, similar to the landform observed within and immediately surrounding the Site.
- 6.3.13. The topography of the wider landscape is varied, but is principally governed by the Rivers Erewash and Trent; to the west of Stapleford and south of Toton and Chilwell, respectively. Land slopes with varying gradient to the south into the wide Trent valley at around 30m AOD, and to the west land rises relatively to Windmill Hill between the A52 and Stapleford before sloping into the narrower valley of the Erewash at just below 40m AOD. Windmill Hill directly east of the settled area of Stapleford, Burnt Hill south of Bramcote village, Bramcote Hills and Stapleford Hill between Bramcote and Stapleford, and Stoney Clouds north of Sandiacre all form prominent localized topographical features.
- 6.3.14. Contextual topography is shown in **Figure 6.3**.

Hydrology and Water Features

- 6.3.15. There are no water bodies within the Site boundaries. As noted above there is a ditch located across the Sites northern boundary draining in a broadly east-west direction.
- 6.3.16. In the surrounding landscape the River Erewash flows approximately 500m west of the Site flanking the west of the Toton Sidings. The Erewash Canal is located to the west of the river.

Vegetation Patterns

- 6.3.17. Vegetation on the Site itself is limited to the boundaries and is not contiguous. There is a length of hedgerow along much of the northern boundary, with a gappy section extending towards the northern corner; around which are some established trees associated with the curtilage of Bessell Lane Farm. A belt of trees and scrub can be found bordering to the west between the

Site and the Toton sidings, connecting into a wider, more established linear woodland between Toton and the railway lines continuing south to Toton Field Nature Reserve. Along the south is a section of hedgerow extending from the south-west corner that separates the PRoW from the Site: where the PRoW turns north to cross the Site the hedgerow meets a small woodland block between the Site and the residential edge, before the Site boundary is then delineated by garden fences and vegetation. This vegetation towards the south-west corner including the hedgerow and small woodland block comprise the northern extents of the Toton Field Local Nature Reserve. Rear gardens nearest the south-east corner frequently contain established trees. Along the east are several established roadside trees to the B6003.

- 6.3.18. Within the wider landscape the vegetation pattern is typical of its settled nature, with vegetation generally limited to that of gardens and street trees, although other pockets exist such as open spaces at Archers Recreation Ground in Stapleford to the north and hedgerows dividing field parcels across farmland to the east. Toton Fields Nature Reserve to the south comprises mixed vegetation patterns of wetland, wooded areas and open fields.

Public Access

- 6.3.19. There is one Public Right of Way (PRoW) on Site – ‘Beeston FP17’, traversing the Site from the B6003 to the northern end of Toton Fields Nature Reserve where it meets Bridleway ‘Beeston BW127’.

- 6.3.20. Other nearby ProWs include:

- ‘Beeston BW27’ which commences from the B6003 opposite the Site extending to the east past the Park & Ride and then north to the A52 roadbridge before entering the residential areas of Stapleford and Bramcote to the north.
- There are two bridleways passing to the west of the Site along the Sidings from Bessell Lane to Toton fields Nature Reserve

Night-time / Lighting Baseline

- 6.3.21. The Site itself does not include any existing sources of light. The surrounding urban edge and associated land uses are however lit to a greater or lesser extent. Immediately adjacent to the eastern boundary of the Site is Stapleford Lane (B6003), with street lighting. The existing residential edge located adjacent to the southern extents of the Site also provide an existing light source within the immediate context of the Site, and to a lesser extent Toton Freight Yard adjacent to the western edge of the Site.

Landscape Related Designations

- 6.3.22. There are no formal landscape designations such as National Parks, National Landscapes, or Registered Parks and Gardens (RPGs) within or in close proximity to the Site.

- 6.3.23. The impacts upon heritage assets and ecological designations are assessed specifically within the cultural heritage and biodiversity chapters of the Environmental Statement. However, as such designations have some relevance in the consideration of landscape value, those in closest proximity to the Site are identified for this purpose (refer to **Figure 6.2: Planning Designations**). These principally comprise:

- Toton Fields Local Nature Reserve, immediately adjacent to the south western Site boundary and extending south;

Landscape and Visual Amenity

- Bramcote Conservation Area located c. 1.2km north east;
- The following listed buildings are located within close proximity to the Site:
 - Grade II Listed Building 'Lock at SK 484 351' (HE ref:1204172), c. 635m to the west;
 - Grade II Listed Building 'Canal Bridge at SK 484' (HE ref: 1087968), c. 635m to the west;
- Other listed buildings within the study area include:
 - Grade II Listed Building (HE ref: 1087972), c. 1.6km to the south west;
 - Grade II Listed Building (HE ref: 1087976), c. 2.0km to the south;
 - Grade II Listed Building (HE ref: 1281310), c. 2.0km to the south;
 - Grade II Listed Building (HE ref: 1247985) c. 1.6km to the north;
 - Grade II Listed Building (HE ref: 1204499) c. 1.6km to the north; and
 - Grade II Listed Building (HE ref: 1204492) c. 1.6km to the north east.

6.3.24. While potential impacts upon heritage assets themselves are addressed separately, consideration is given to some assets (such as Scheduled Monuments and Conservation Areas) and their settings in landscape character and visual amenity terms where relevant.

6.3.25. Bramcote Conservation Area (CA) in broad terms encompasses the historic core and spine of the village, plus King George's Park and woodland on the site of the former Bramcote Hall. The woodland lies over the local high point, Burnt Hill, to the north and east of which the majority of the Conservation Area lies. While some important characteristics comprise the tree cover or the distinctive herringbone-laid sandstone walls and associated southern entrance to the village, other include the far-reaching views out of the CA due to the local topography.

Landscape Character

6.3.26. Reference has been made to published guidance on landscape character for the area (refer to **Figure 6.4, Landscape Character**). Those of relevance to the Site and its context comprise:

- National Character Area 69: Trent Valley Washlands;
- National Character Area 49: Sherwood;
- East Midlands Regional Landscape Character Assessment, East Midlands Landscape Partnership, April 2010; and
- Greater Nottingham Landscape Character Assessment 2009.

National Character

6.3.27. The Site lies within NCA69: Trent Valley Washlands. The key characteristics of the NCA include:

- *"A 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;*

- *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;*
- *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.*

6.3.28. The 'Statements of Environmental Opportunity' (SEOs) include SEO1 which states that new development should be carefully planned and managed to ensure the character is strengthened and landscape elements such as woodlands and the hedgerow network are enhanced, and that opportunities for the creation of multifunctional GI are realized so the landscape is resilient to the forces for change.

6.3.29. The 'landscape change' section notes that change as a result of development within the NCA has "had a profound impact on the area with character eroded and distinctive qualities lost", with a high rate of change from urban to rural land uses.

Regional Landscape Character

6.3.30. The 2010 East Midlands Region Landscape Character Assessment covers Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottingham and Rutland. It describes regional Landscape Character Types (LCTs), highlighting the key forces of change acting upon the landscape and broad guidance on shaping the future landscape.

6.3.31. The Site sits within LCT 10.b Sandstone Forests and, much of which stretches northwards from Nottingham to Workshop and beyond. Consequently, many of the key characteristics of this LCT are not directly related to the Site or its immediate surrounds.

6.3.32. The key characteristics of LCT 10.b Sandstone Forests and Heaths are described as:

- *'Undulating landform of low rounded hills on sandstone geology with numerous dry valleys;*

Landscape and Visual Amenity

- *Mosaic of broadleaved, mixed and coniferous woodlands creating wooded skylines and enclosing extensive tracts of open arable farmland with large scale geometric fields and neatly trimmed and often treeless hedges;*
- *Free draining acid soils supporting many areas of unenclosed heathland vegetation often associated with woodland areas and also on marginal land and roadsides;*
- *Narrow river corridors with pasture, flood meadows and woodland, contrast with adjacent open arable farmland;*
- *Frequent evidence of remains of coal mining industry with mining settlements and spoil heaps, disused mines and old railway lines, and areas associated with reclaimed pit heaps;*
- *Numerous large estates and associated parkland; and*
- *Sandstone quarries for aggregates are locally conspicuous.'*

District Landscape Character

- 6.3.33. The Greater Nottingham Landscape Character Assessment (GNLCA) was jointly produced by a number of local authorities forming the countryside setting to Nottingham City. It utilizes the National Character Areas as the basis of the assessment (referred to as Regional Character Areas), which are subdivided into a series of Landscape Character Types (LCT). A greater level of detail is provided within each LCT through the definition of 'Draft Policy Zones' (DPZs), which comprise discrete parcels with distinct characteristics.
- 6.3.34. The GNLCA as it applies to Broxtowe Borough is appended to the Part 2 of the Local Plan, which defines the PZ boundaries within the borough. The whole of the development allocation ('Land in the Vicinity of the proposed HS2 Station at Toton') including the Site is excluded from definition within this Character Assessment. Within the vicinity of the Site is NCO1 'Erewash River Corridor' to the west and the 'Beeston and Stapleford Urban Fringe' (SH060) to the north-east.

SH060 Beeston and Stapleford Urban Fringe DPZ

- 6.3.35. The key characteristics of SH060 are described as follows:
- *"A flat to gently undulating landform, sloping down to the west*
 - *The landscape is heavily influenced by the urban environment with the residential areas of Beeston and Stapleford prominent on the edges. The area is largely enclosed on all sides by built development with connecting linear roadways dissecting the area. The area functions as a green buffer preventing merging of adjacent urban areas*
 - *To the west of the area are the large Toton railway sidings, however their influence is localised due to enclosure by embankments*
 - *Land use is agricultural, predominantly arable due to presence of high-grade agricultural land. There are some pockets of set aside*
 - *There is a geometric field pattern of mainly medium to large sized fields, bounded by neatly trimmed hedgerows.*

- *The area to the east of the B6003 is characterised by an irregular geometric field pattern. Most is modern enclosure although more historic enclosure is present north of Beeston*
- *Hedgerows are well maintained, but there is evidence of erosion which has led to fragmentation*
- *Small groups of trees and areas of linear woodland often provide screening along the urban edge.*
- *The combination of small woodlands and hedgerow trees within agricultural fields given the perception of a wooded landscape*
- *There are small, localised areas of historic woodland concentrated in linear belts along field boundaries and on the boundary of the urban area in the south of the DPZ and along the boundary edge of the golf course to the east.*
- *Views along the A52 highway are for short distances due to its sunken form and enclosure by wooded embankments.*
- *Linear woodland belts are planted along the B6003 screening views into the wider landscape*
- *Where views are available from transport corridors these are short distance. Views to the west of the character area are more open, with views across arable farmland to the adjacent settlement of Long Eaton. Views of the wooded Burnt Hill can also be seen from several locations*
- *Infrastructure routes are common features with a planned layout of linear roads connecting settlements which cross through the DPZ*
- *Modern residential housing estates are nestled into the landscape. The urban landscape is more apparent to the west of the area with views to the adjacent settlement of Long Eaton on rising ground*
- *Prominent overhead power lines cut across the area and a substation is also located along the B6003*
- *There is a sewage works to the west of the area which is screened from the A52 by a linear woodland belt. Buildings are low level and woodland screens the facility well*
- *Disturbance from traffic noise is apparent across the area although roads are generally well screened."*

6.3.36. In terms of condition, the published assessment sets out that it is moderate. It states:

"The landscape is well managed through agricultural practices. However, in some instances these practices have led to the erosion of characteristic features e.g. hedgerows and hedgerow trees within some areas of the DPZ. Although the surrounding residential areas convey an urbanising effect in many instances the urban boundary is screened by woodland and hedgerows reducing their influence."

Landscape and Visual Amenity

6.3.37. In terms of strength of character, the local area is considered to be moderate to weak. It states:

"There is an even distribution of features and a coherent pattern to the landscape in the east, however this character becomes more eroded towards the west. The farmland is not distinctive with medium to large scale monoculture arable fields of relatively uniform character. Loss of hedgerows and hedgerow trees erodes the character further. There are few distinctive features."

6.3.38. A number of landscape actions are identified for SH060, as follows:

- *Enhance the numbers of hedgerow trees across the DPZ and encourage management and conservation of existing trees.*
- *Enhance the field pattern through replacement of hedgerows which have been lost and resisting further field size expansion.*
- *Restore the condition of the hedgerows through less intensive management where hedges are low and thin and encourage replacement planting where they are fragmented. Where fences are required to contain livestock ensure hedgerows are also planted.*
- *Conserve the remaining historic woodland areas, small groups of trees and linear woodland belts.*
- *Ensure the built development remains sensitively screened from view by linear woodland planting where possible.*
- *Conserve and augment linear belts of woodland along transport routes to ensure they remain indistinct in the landscape."*

NC01 Erewash River Corridor DPZ

6.3.39. The key characteristics of NC01 are described as follows:

- *"Narrow low alluvial floodplain lying in a broad valley*
- *The underlying geology comprises shales and layers of sandstone alternating with seams of coal. The river is set within a relatively deep cut valley along the crest of a local anticline in the underlying coal measures which exposed coal seams along the valley sides. The profitable nature of these seams resulted in significant mining activity in the area*
- *The meandering river channel of the Erewash is not visually prominent although the effects of its presence are clearly seen in the landscape e.g. wetland habitats and marginal bank side vegetation*
- *Subsidence from coal has led to the formation of several shallow lakes along the river corridor which are largely open although scrub woodland is beginning to establish along the banks*
- *The Erewash Canal is parallel to the western boundary of the DPZ, originally created to give access to wider markets for coal and textiles*
- *Urban fringe character which is strongly influenced by surrounding built and industrial development along the valley sides. In certain locations, the river is heavily enclosed by urban development*

- *Low lying floodplain pasture is frequently used as grazing meadow primarily for horses and cattle*
- *Arable farming is evident on the valley slopes. Where field boundaries are present these are mainly formed by well managed hedgerows. Field boundaries are often irregular due to influence from the meandering river corridor*
- *Typical wetland habitats such as reeds, rushes, ponds and open water are characteristic features*
- *Native woodland dominated by wet woodland species such as alder and willow is characteristic of the area. Young regeneration scrub is also common*
- *Belts of linear woodland are often used on the valley sides and along the railway corridor to screen and filter views of transport infrastructure, industry, large warehouses and residential expansion*
- *A railway line runs along the length of the river corridor on a raised embankment*
- *There are several sewage treatment plants situated within the DPZ which are visible above boundary vegetation*
- *A large viaduct to the west of Awsorth along the line of a disused railway line provides a historic remnant of the area's industrial past and is prominent in the DPZ."*

6.3.40. In terms of condition, the published assessment sets out that it is moderate. It states:

"The railway today runs along the length of the valley raised in most instances on an embankment making it a prominent feature within the landscape. In particular the large railway sidings at Toton are visible landscape features although screened to some degree by their enclosure by embankments. The river itself is low-lying and not visually prominent..."

There is evidence of management of the landscape with consideration towards the sensitive ecological habitats which have a naturalistic appearance. The various urban influences surrounding and within the river corridor ... also have an effect on the overall perception of the landscape."

6.3.41. In terms of strength of character, the local area is considered to be strong. It states:

"This DPZ is a narrow alluvial floodplain lying in a broader valley associated with the River Erewash. The sloping sides of the valley and enclosed nature of views are strong characterising features. Woodland filters views along the valley floor. Views to the surrounding urban areas are visible from the valley, these settlements also provide views into the area from towns such as Ilkeston situated on the valley sides."

6.3.42. A number of landscape actions are identified for NCO1, as follows:

- *"Conserve the distinctive flood plain character of the river valley*
- *Conserve and enhance the enclosed feel of the river corridor along the valley sides*
- *Conserve the predominantly pasture grazing on the valley floor*

Landscape and Visual Amenity

- *Conserve and enhance the long views along the valley by managing the distribution of woodland to ensure views are not obscured*
- *Conserve and enhance the diversity of wetland habitats which add visual interest to the area*
- *Conserve and enhance the areas of linear woodland and riparian vegetation along the river corridor*
- Ensure that further built development does not affect the character of the valley and suitable mitigation measures are put in place for larger developments, such as woodland planting to soften and screen it."

Landscape Character Summary

6.3.43. From the detailed evaluation undertaken for this LVIA, the immediate context to the Site shares some characteristics identified in the baseline landscape character assessments described above, particularly the relevant Greater Nottingham Landscape Character Assessment Sherwood DPZs. Those considered to be consistent with published guidance include:

- Urban fringe character, including along the river which can be enclosed by development;
- Gently undulating landform sloping down to the west;
- Narrow floodplain in a broad valley with the meandering channel of the River Erewash;
- A railway line along the length of the river corridor;
- Localized influence of the Toton Sidings;
- Predominantly arable land use with geometric field pattern with modern enclosure;
- Small groups of trees and linear woodland providing screening along the edge;
- Small woodlands and hedgerow trees giving the perception of a well wooded landscape;
- Tree belts along the A52 and B6003 screening views into or of the wider landscape;
- Prominent overhead power lines; and
- Noise disturbance from traffic is apparent.

Visual Baseline

6.3.44. This section provides a description of the nature and extent of the Site's predicted visible extents, and 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.

6.3.45. 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 topography, hedgerows, woodlands or buildings, and can also be influenced by distance from a site.

- 6.3.46. A computer generated ZTV has been produced for the Site and the Proposed Development (refer to **Figure 6.5, 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.
- 6.3.47. 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.
- 6.3.48. Although the ZTV represents a 'screened' scenario, the OS data sources only tend to include substantial blocks of trees and woodland. Given that much of the existing green infrastructure around the site forms a 'layering effect' due to the lower-level hedgerows, hedgerow trees and also smaller scale woodlands/tree belts, these are not included in the ZTV. Consequently, overall screening value is underestimated and the ZTV represents a 'worst-case scenario'.
- 6.3.49. Due to its urban fringe context and the sloping nature of land into the Trent Valley to the west, the Site is generally well contained, to the north and south primarily by existing development, to the east by the rising topography and to the west by linear tree cover and the Toton Sidings.
- 6.3.50. Based on the ZTV and informed by subsequent site survey and observations from the field work, the visual envelope can be broadly defined as follows:
- The settled edges of the west of Chilwell and north Toton to the south and south-east;
 - The B6003 corridor to the east;
 - Rising ground towards Burnt Hill to the north-east;
 - Farmland on high ground at Windmill Hill to the north; and
 - Toton Freight Yard and associated rail infrastructure to the west.
- 6.3.51. The principal receptors include:
- Public footpath users along the boundaries of, and within, the Site;
 - Public bridleway users passing to the west;
 - PRoW users to the east and north-east (on the opposite side of the B6003);
 - Road users passing along the B6003;
 - Users of Toton Lane Tram Stop to the north-east;
 - School pupils and staff using school grounds to the north;
 - Users of the A52 to the north; and
 - Residents along the settled edges of Chilwell and Toton.

Landscape and Visual Amenity

- 6.3.52. There may also be potential receptors on high ground between Stanton-by-Dale and Risley to the north-east.
- 6.3.53. The nature and context of existing views from selected key locations and receptors is described in detail in the Viewpoint Photographs at **Figure 6.6**.

6.4. Assessment of Likely Significant Effects

- 6.4.1. Without a considered and responsive approach to masterplanning (which would include green infrastructure provision), potential impacts could include the following:
- Landscape harm through a scenario of the complete loss and removal of all landscape features on, or near the Site, and no compensatory landscape habitats or any additional landscape enhancement;
 - Landscape and visual harm, through an inappropriate design response, such as a poorly conceived masterplan in terms of the quantum of development, disposition of land uses, and the scale and height of buildings; and
 - Effects on the visual resource through, for example, the removal of all existing Site features which provide screening, such as hedgerow and tree planting, and no replacement or additional planting to provide containment or screening effects.
- 6.4.2. However, the process of design is an iterative one and potential landscape and visual effects arising from the Proposed Development have been identified as part of the development of the proposals. Mitigation measures are an integral part of the project; evolving through the iterative nature of the design process. Mitigation in terms of the assessment of landscape and visual impacts therefore comprise elements such as the retention (and reinforcement) of existing features, as well as the creation of new features and enhancement of undeveloped open space. Mitigation measures of greatest relevance to landscape and visual matters are set out in detail at **Table 6.7**.
- 6.4.3. The assessment of effects therefore focusses on the construction phase through to completion of the Proposed Development (the Operational phase at 'Year 1'), with residual effects comprising effects in the long term once planting has matured ('Year 15').
- 6.4.4. Standard practices for avoiding and reducing environmental effects employed during construction are also incorporated into the assessment, set out in the 'Mitigation' section.

Overview of Landscape Effects

- 6.1.1. 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.
- 6.1.2. 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.
- 6.1.3. The landscape character of the study area is documented at national, county levels and district levels. The findings of these studies represent a generally consistent analysis of landscape

character, and this has been supported by an analysis of the local landscape character of the Site in the local landscape context, as part of this LVIA.

- 6.4.5. This includes reference to SH060: Beeston and Stapleford Urban Fringe as well as NCO1 'Erewash River Corridor'. As previously noted in the baseline, this presents guidance at an appropriate scale and detail and also represents the most recent baseline position on landscape character for the area.
- 6.1.4. 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

- 6.1.5. In order to inform judgements on value and susceptibility the following section refers to the baseline information 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

- 6.1.6. In LVIA, landscape value is the value attached to a potentially affected landscape. It is relative to the different stakeholders and different parts of society that use or experience a landscape.
- 6.1.7. Landscape value is not solely indicated by the presence of formal designations and a range of factors influence landscape value.
- 6.1.8. GLVIA3 sets out a range of factors that can help in the identification of landscape value and these concepts have been expanded in the later LI TGN 02/21.
- 6.1.9. 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 (refer to **Appendix 6.1**) accord with those presented in the GLVIA3 and LI TGN 02/21.
- 6.1.10. 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.
- 6.1.11. This section determines the value of the defined LCA (and local landscape context) 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) and, as part of this LVIA, is structured on the following considerations as set out in the methodology, (**Appendix 6.1**):
- Natural and cultural heritage interests (i.e. ecological, geological or heritage matters);
 - Landscape condition of individual elements or overall structure;
 - Landscape associations;
 - Distinctiveness and sense of place;
 - Recreational opportunities in the landscape context;

Landscape and Visual Amenity

- Perceptual aspects (in respect of scenic/visual quality);
- Perceptual aspects (in respect of wildness and tranquility); and
- Landscape function.

6.4.6. This assessment has considered these issues, the judgements on landscape value for the relevant character types and areas, including reference to 'the site in its local landscape context'. A detailed examination of value under each of the considerations is presented in **Appendix 6.2**, and the conclusion for each assessed landscape is set out below.

6.4.7. On balance, it is considered that, in the context of the Site and study area, both SH060: Beeston and Stapleford Urban Fringe and NCO1: Erewash River Corridor are of **medium value** in landscape terms.

6.4.8. On balance, it is considered that the value of the Site and its immediate context is also of **medium value** in landscape terms.

6.4.9. These are carried forward to the determine landscape sensitivity.

Landscape susceptibility

6.4.10. In LVIA, landscape susceptibility is the ability of a landscape to accommodate change without undue consequences for the maintenance of the baseline situation.

6.4.11. 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).

6.4.12. Susceptibility is determined based on criteria set out in the methodology and using professional judgements the judgements on landscape susceptibility for the relevant character types and areas, including reference to 'the site in its local landscape context' is set out as follows.

6.4.13. Overall, the landscape susceptibility of the wider surrounding landscapes of SH060: Beeston and Stapleford Urban Fringe and NCO1: Erewash River Corridor are considered to be **medium** (noting that this can vary at specific locations depending on levels of inter-visibility and physical/visual containment).

6.4.14. The landscape susceptibility for the Site in its local landscape context, susceptibility to the type of development proposed (i.e. residential) is considered to be **medium**.

6.4.15. Alongside landscape value, these are taken forward to the balance and consideration of landscape sensitivity.

Landscape sensitivity

6.4.16. 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.

6.4.17. 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.

- 6.4.18. Lower levels of sensitivity will occur where value and susceptibility are toward the lower end of the scale.
- 6.4.19. More central levels of sensitivity will occur where one component is toward the higher end of the scale whilst one is toward the lower.
- 6.4.20. 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 6.2: Determining Landscape Sensitivity

Landscape Character	Value	Susceptibility	Judgement on sensitivity
SH060: Beeston and Stapleford Urban Fringe	Medium	Medium	Medium
NCO1: Erewash River Corridor	Medium	Medium	Medium
Site and its local landscape context	Medium	Medium	Medium

- 6.4.21. 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.

Construction

Landscape Impacts at Construction

- 6.4.22. This section describes the likely construction impacts as a result of the Proposed Development.

Construction Impacts

- 6.4.23. The initial construction activities on the Site are likely to comprise the introduction of infrastructure and enabling works, including:
- Site clearance, including vegetation clearance along boundaries where necessary and select tree removal at the Site access onto the B6003;
 - Highway works, for access into the Site;
 - Temporary access and haul routes, Site compounds and car parking;
 - Utilities works including removal of the existing pylons, rerouting and underground installation of the currently overhead power lines across the Site;
 - Soil stripping and storage, Site re-grading and the creation of practical development platforms;

Landscape and Visual Amenity

- The creation of Site roads with associated service provision;
- The early implementation of the structural landscape scheme (where appropriate); and
- Ongoing and emerging built form in subsequent phases.

- 6.4.24. During the enabling works, arisings will include topsoil and subsoil which is likely to be stored and recycled within the Site.
- 6.4.25. Construction is likely to generate a variety of vehicle movements including on site machinery such a general plant, forklifts, cranes and lifting equipment. Off-site movements are likely to include light and heavy haulage, commercial vehicles, and site staff vehicles. Site hoarding, temporary signage and porta-cabins are likely to be erected. Construction hazard lighting will also be visible and there also likely to be the aural intrusion of vehicle reversing alarms.
- 6.4.26. Construction work will progress in several sub-phases with the focus of building work shifting throughout the Site. The result of this will be that the baseline conditions will evolve during the construction stages to include the completed built elements of the Proposed Development and implemented landscape scheme.
- 6.4.27. During construction there will be several changes across the Site. The landscape of the Site will change from the current agricultural areas to that of a construction site whilst the Proposed Development is being implemented. The nature of these impacts will be temporary (although the consequences permanent) and in the longer term will be replaced by the implemented masterplan for the Proposed Development. Some parts of the Site are proposed for green infrastructure and ecological mitigation and these areas would be subject to less disturbance from construction activity, although a change in character will occur from agricultural to various areas of public open space, ecological habitats and green infrastructure.

Effects on Landscape Character during Construction

- 6.4.28. The main effect on landscape character during the construction phase is likely to be the gradual transformation of the Site from a predominantly open agricultural landscape to the active development site. This currently largely open, agricultural landscape, albeit influenced by the existing settlement edge, will emerge as an active construction site, but will include substantial areas of green infrastructure, primarily the northern and western portions of the Site.
- 6.4.29. Vegetation resources on Site primarily consist of boundary hedgerows and trees. The Proposed Development will seek to retain these resources wherever possible and enhance it where it is retained (see **Figure 4.1: Parameter Plan**).
- 6.4.30. Throughout the construction phase, good practice shall ensure that on-site works do not give rise to direct or indirect effects upon off-site water features.
- 6.4.31. With regards to 'SH060: Beeston and Stapleford Urban Fringe', and 'NC01: Erewash River Corridor', construction would not result in any direct impact as the Site lies beyond both of these DPZs. Any change would be indirect and constitute perceived alteration to landscape setting, such as through site preparation, loss of agricultural land, vehicular movement and disturbance. However, as noted the Site is typically well enclosed with a sense of separation from the wider landscape. Consequently, indirect impacts would be limited: even to the west, where the Site lies in close proximity to the 'Erewash River Corridor', the DPZ in the vicinity of the Site is dominated by the Toton Sidings, the freight yard and other industrial / commercial premises.

6.4.32. The overall assessment of effects on landscape character during construction is set out below.

Table 6.3: Assessment of Landscape Effects During Construction

Landscape character	Sensitivity	Magnitude of impact		Significance of effect
SH060: Beeston and Stapleford Urban Fringe	Medium	Construction	Negligible	Negligible adverse (Indirect)
NC01: Erewash River Corridor	Medium	Construction	Negligible	Negligible adverse (Indirect)
Site and its local landscape context	Medium	Construction	Medium to High	Moderate to major adverse

Effects on Visual Amenity at Construction

6.4.33. During construction works, there are likely to be effects on the visual amenity of the local area. The extent to which the construction phase would affect visual amenity is likely to change regularly, depending on the nature and location of the works.

6.4.34. Construction activities would be visible from the majority of areas identified within the visual envelope and are likely to comprise:

- Excavation works, soil stripping operations, bare earth and stockpiled soils;
- Removal of select number of trees at the Site access on B6003 (Toton Lane);
- Site hoarding/perimeter fencing;
- Signage;
- Low level floodlights;
- Construction traffic movements with flashing hazard lights;
- Temporary site infrastructure including porta-cabins, construction compound, haulage routes, material stockpiling;
- The gradual construction of built-form; and
- Site plant/large scale machinery.

6.4.35. All visual effects during construction would be temporary and primarily local in scale. There are likely to be some specific changes in views in close proximity to the Site. From longer distances, any views of construction activities are likely to be more limited, partial and screened to some degree.

6.4.36. A detailed analysis has been completed for the construction phase for each of the representative viewpoints and is set out in the following table.

Landscape and Visual Amenity

Table 6.4: Summary Assessment of Visual Effects During Construction

Viewpoint	Sensitivity	Magnitude and Significance
1. From Toton Lane between Toton Park & Ride and A52 roundabout	Medium	Mag: Negligible / Low Sig: Minor Adverse
2. From B6003 at the northern edge of Toton	Medium	Mag: Medium / High Sig: Moderate / Major Adverse
3. From PRoW crossing the Site westwards towards the north-west of Toton	High	Mag: High Sig: Major Adverse
4. From PRoW on the edge of Toton Field LNR at the south-western corner of the Site	High	Mag: Medium / High Sig: Moderate / Major Adverse
5. From PRoW joining Bessell Lane, near the north-west corner of the Site	High	Mag: Medium Sig: Moderate Adverse
6. From PRoW through Archers Field Recreation Ground	Medium / High	Mag: Negligible / Low Sig: Minor adverse
7 From public bridleway from B6003 to Stapleford, east of the tram stop	High	Mag: Negligible / Low Sig: Minor adverse
8. From public bridleway between Inham Road, Chilwell and Baulk Lane	High	Mag: Negligible Sig: Negligible / Minor adverse
9. From public bridleway along Baulk Lane south-west of Southfields Farm	High	Mag: Negligible Sig: Negligible / Minor Adverse
10. From public bridleway along Common Lane west of Southfields Farm	High	Mag: Negligible Sig: Negligible / Minor adverse
11. From public footpath between Stapleford and Common Lane / Baulk Lane	High	Mag: None / Negligible Sig: Negligible adverse
12. From St Giles' Church, Sandiacre	Medium	Mag: Negligible Sig: Negligible adverse
13. From PRoW off No Man's Lane towards Risley	High	Mag: Negligible Sig: Negligible / Minor Adverse

6.4.37. In respect of visual effects at construction, there are some locations where receptor groups would be subject to significant effects (as defined by the methodology), however this represents a very limited selection of visual effects with the majority of visual receptors in the wider landscape/townscape being not significant.

- 6.4.38. Receptors with the potential for experiencing significant effects during construction are assessed as being limited to those of highest sensitivity within the Site boundary or adjoining / approaching at short distance, primarily comprise PRow users meeting the boundary to the south-west and north-east, crossing the Site between the two points, and passing the Site along the B6003 directly east of the Site. Some residents adjoining the southern Site boundary whose dwelling elevations are orientated towards the Site with views unrestricted by garden / curtilage vegetation may experience significant adverse impacts where construction activity occurs in close proximity to their property.
- 6.4.39. Furthermore, unlike landscape character, for visual effects specific instances or individual effects that are deemed significant do not necessarily equate to 'significant visual effects' overall. This is due to the need to take a balanced view on the overall visibility of the Site and visual effects in the round.

Operation

Landscape impacts

- 6.4.40. The following section describes the predicted changes to the physical landscape elements and features on the Site, giving rise to the subsequent perceived changes in landscape character.
- 6.4.41. It is during the construction phases of the Proposed Development that most of the physical landscape resources will be altered. Following the short-term impacts of the construction phase, when completed, the Proposed Development would give rise to changes in the local landscape character in the longer term as a consequence of built development.
- 6.4.42. These longer-term impacts following construction comprise the 'operational phase', which are considered at completion of the project, and in terms of any further inherent change over time.
- 6.4.43. Impacts at completion (Year 1) are concerned with the alteration in the landscape from the current undeveloped context of Site to the future scenario of the Proposed Development. The built form of the Proposed Development would be complete and will be a permanent component in the landscape.
- 6.4.44. In the long term after completion (Year 15), in addition to the alteration in and to the landscape arising from the implementation of the Proposed Development, impacts would 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. Given the nature of the scheme, these impacts are considered to be long term and not reversible. 'Year 15' effects and the associated mitigation are considered separately to those at 'Year 1'; as part of the residual impacts set out at Section 6.5 below.

Impacts on physical landscape resources

- 6.4.45. Alteration to the physical landscape resources during the construction phases of the Proposed Development include the change in land use, changes to landform including the creation of development platforms, removal of existing trees and other vegetation clearance, creation of new public open space in the west of the Site, implementation of proposed mitigation and the movement of construction activity. More specifically, land use change would comprise direct loss of agricultural to new residential built form and publicly accessible green space with flood attenuation and structural landscape planting.

Landscape and Visual Amenity

6.4.46. Overall, the physical landscape impacts on completion of the Proposed Development are considered to be direct and will be limited to the extent of the Site. There will be no additional direct impacts on the wider landscape context.

6.4.47. In the context of the physical impacts considered above, the following sections set out an assessment of the likely effects on the relevant landscape character areas including the Site.

Impacts on landscape character

6.4.48. Impacts on the local landscape character are defined as those occurring on the Site and in the immediate landscape context of the Site. In terms of the Site and local landscape character, the Proposed Development would result in the direct loss of agricultural (arable) land to new homes and related vehicular access routes, but which includes a strategy for green infrastructure.

6.4.49. Despite the duration of impact being long term, as is the case for the majority of developments of the type of development proposed, the Proposed Development will only influence the landscape at a local scale.

6.4.50. Although the Site itself is currently agricultural in nature, it is heavily influenced by the urban edge, both physically and visually: there is the directly adjacent edge of Toton to the south, nearby Long Eaton and Stapleford's built edges to the west and north, the presence of the Park & Ride, and the train track and railway sidings, together with the degree of visual enclosure in all directions including to the north beyond the immediate context. The Site represents a small portion of the urban-rural edge farmland that is characteristic within the local landscape, and one which is well related to the city's wider settled fringes.

6.4.51. Some open space would be incorporated, primarily within the west and north-west as a reflection of the existing residential edge of Toton and linear green space / habitat adjoining the railway lines to the west, providing a sympathetic and consistent transition to the landscape along the Erewash Valley corridor. Several green links would also be included, comprising open space corridors with pedestrian links, ditches, linear structural planting and / or avenue trees connecting with a series of incidental green spaces. The existing public right of way that passes through the Site would be retained as part of the scheme, however this would be redirected around the proposed area of residential built form where it crosses the Site itself from the north-eastern to southern boundary.

6.4.52. Consequently, adverse impacts upon the character of the Site arising from the introduction of new residential built form and associated infrastructure are considered together with the beneficial impacts associated with the mitigation measures and the factors relating to responsive layout and landscape design: the magnitude of change upon the Site and its immediate setting is considered to be medium to high, with a Moderate Adverse significance of effect overall on completion.

6.4.53. Impacts on 'SH060: Beeston and Stapleford Urban Fringe' and upon 'NC01 Erewash River Corridor' relate to the effects on the landscape character areas as defined by published guidance. However, it is noted that the Site does not lie within or immediately abutting either character area (although NC01 is in close proximity to the west of the Site) and consequently impacts would be indirect and associated with any resulting change to their setting.

6.4.54. Like the landscape of the Site and its immediate context the character areas of SH060 and NC01 are defined by existing settlement areas associated with the suburbs of west Nottingham, comprising (in the context of the Site) Toton to the south, Chilwell to the east, Stapleford to the

north and Sandiacre to the north-west, together with the proximate town of Long Eaton to the south-west.

- 6.4.55. The Proposed Development will result in the loss of some of the urban fringe farmland to the southeast of SH060 to either side of the B6003, and immediately to the east of NC01. With a land use change from agricultural to residential, there would be an intensification of the built settled fringe in part of the local context to both DPZs. Although this intensification would be more marked for NC01 given the relative proximity, the Erewash River Corridor is typically enclosed by settlement (both residential and industrial / commercial) in the local context to the north and south of the Site. The nature of the Proposed Development would nevertheless be consistent with much of the settled edge in the vicinity, comprising residential development punctuated by (or adjoining) green space.
- 6.4.56. In terms of the proportion of loss of existing landscape elements across the Site as a contributing factor to SH060's local context (including hedgerows for example), the scale of change is considered to be relatively modest overall. This is on the basis of loss of agricultural land with limited internal landscape features and loss of structural vegetation confined to the removal of a select number of trees to facilitate vehicular access onto the B6003 along the Site's eastern boundary. There would also be the alteration of some undeveloped land to public open space and areas of green infrastructure, incorporating the retention and protection of the majority of field boundary vegetation as part of the development proposals.. There would be no impact on the PROW network in the vicinity of the Site and through SH060. On balance therefore, given the scale of the Proposed Development, existing presence of the settled edge in the DPZ's immediate vicinity and broader extents of the SH060, the magnitude of change to the DPZ's context is assessed to be no greater than Negligible, resulting in indirect effects of Negligible Adverse significance.
- 6.4.57. As noted above, the Proposed Development would result in an increase in residential development in close proximity to NC01, both physically and visually providing enclosure to this corridor. This is a landscape however with an existing urban fringe character with strong influences from the surrounding built and industrial development along the valley sides. The Proposed Development would not impact upon the linear woodland belt to the western boundary, nor interrupt any existing long views along the corridor itself: indeed, additional tree and shrub planting along the western boundary would further reinforce the sense of enclosure along this section of the DPZ, and western extent of new housing would reflect the existing built edge of Toton along the valley side. The PROWs passing the western boundary would remain as existing. The magnitude of change to the DPZ's context is assessed to be no greater than Negligible, resulting in indirect effects of Negligible Adverse significance.

Landscape Effects

- 6.4.58. The overall assessment of effects on landscape character is set out in the following table. 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).
- 6.4.59. Previous judgements on landscape effects during construction (as set out in **Table 6.5**) are included for reference and completeness.

Landscape and Visual Amenity

Table 6.5: Assessment of Landscape Effects at Completion

Landscape character	Sensitivity	Magnitude of impact		Significance of effect
SHO60: Beeston and Stapleford Urban Fringe	Medium	Construction	Negligible	Negligible adverse
		Completion	Negligible	Negligible adverse
		Year 15	Negligible	Negligible adverse
NC01: Erewash River Corridor	Medium	Construction	Negligible	Negligible adverse
		Completion	Negligible	Negligible adverse
		Year 15	Negligible	Negligible neutral
Site and its immediate context	Medium	Construction	Medium to High	Moderate to major adverse
		Completion	Medium to High	Moderate adverse
		Year 15	Medium to High	Moderate adverse

Visual Impacts

- 6.4.60. The sensitivity of a visual receptor is a function of the value attached to a view balanced with the susceptibility of the visual receptor to changes in a view and/or visual amenity.
- 6.4.61. 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.
- 6.4.62. However, for visual receptors it is necessary to understand the specific, direct impacts on each view. Consequently, 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.

Visual Effects

- 6.4.63. A detailed analysis has been completed for a number of representative viewpoints captured during the fieldwork, and these are presented as a series of panoramic photos. The locations are indicated on **Figure 6.5: Viewpoint Locations and PRoW**, with the analysis and photographs included at **Figure 6.6 Viewpoint Photographs**. This includes reference to the sensitivity of the visual receptors and the nature and degree of the likely changes to the view.
- 6.4.64. The following section summarises the main visual impacts likely to be generated by the Proposed Development. This includes reference to the likely significance of effects on specific visual receptors.
- 6.4.65. As with landscape effects, the assessment of visual effects at completion includes reference to construction impacts for completeness and ease of reference (included at **Table 6.4**).

Table 6.6: Summary of visual effects

Viewpoint	Sensitivity	Construction		Year 1		Year 15	
		Magnitude	Significance	Magnitude	Significance	Magnitude	Significance
1. From Toton Lane between Toton Park & Ride and A52 roundabout	Medium	Negligible / Low	Minor Adverse	Negligible / Low	Negligible / Minor Adverse	None / Negligible	Negligible Neutral
2. From B6003 at the northern edge of Toton	Medium	Medium / High	Moderate / Major Adverse	Medium / High	Moderate Adverse	Medium / High	Moderate Adverse
3. From PRoW westwards along the Site's northern boundary towards the north-west of Toton	High	High	Major Adverse	High	Major Adverse	High	Major Adverse
4. From PRoW at the Site's south-western corner to Toton Field LNR	High	Medium / High	Moderate / Major Adverse	Medium / High	Moderate / Major Adverse	Medium / High	Minor / Moderate Adverse
5. From PRoW joining Bessell Lane, near the Site's north-west corner	High	Medium	Moderate Adverse	Medium	Moderate / Major Adverse	Medium	Minor / Moderate Adverse
6. From PRoW through Archers Field Recreation Ground	Medium / High	Negligible / Low	Minor adverse	Low	Minor / Moderate adverse	Low	Minor adverse
7 From PRoW from B6003 to Stapleford, east of the tram stop	High	Negligible / Low	Minor adverse	Negligible	Negligible adverse	Negligible	Negligible adverse
8. From PRoW between Inham Road, Chilwell and Baulk Lane	High	Negligible	Negligible / Minor adverse	Negligible	Negligible Neutral	Negligible	Negligible Neutral
9. From PRoW along Baulk Lane south-west of Southfields Farm	High	Negligible	Negligible / Minor Adverse	Negligible	Negligible Neutral	Negligible	Negligible Neutral
10. From PRoW along Common Lane west of Southfields Farm	High	Negligible	Negligible / Minor adverse	Negligible	Negligible Neutral	Negligible	Negligible Neutral

Landscape and Visual Amenity

Viewpoint	Sensitivity	Construction		Year 1		Year 15	
		Magnitude	Significance	Magnitude	Significance	Magnitude	Significance
11. From PRow between Stapleford and Common Lane / Baulk Lane	High	None / Negligible	Negligible adverse	None / Negligible	Nil / Negligible neutral	None / Negligible	Nil / Negligible neutral
12. From St Giles' Church, Sandiacre	Medium	Negligible	Negligible adverse	Negligible	Negligible adverse	Negligible	Negligible neutral
13. From PRow off No Man's Lane towards Risley	High	Negligible	Negligible / Minor Adverse	Negligible	Negligible / Minor adverse	Negligible	Negligible adverse

Analysis of visual effects

- 6.4.66. As set out in the approach and methodology, effects are considered to be 'significant' where these are judged to be 'moderate to major' or 'major' (either adverse or beneficial) but there remains an element of professional judgement when drawing together an 'overall judgment' on effects such that one single 'significant effect' might not lead to landscape and visual effects being significant on balance. Following on from the detailed visual assessment undertaken at a series of representative viewpoints, the brief analysis below summarises the visual effects.
- 6.4.67. These are described by receptor type so that both the change within views at static geographical locations and potentially transient impacts experienced along relevant routes or journeys are considered.
- 6.4.68. Residents: receptors with direct views of the Site are relatively limited, principally comprising the northern edges of Toton, and potentially some properties within Stapleford.
- The northern edge of Toton comprises residential properties orientated backing onto or perpendicular to the Site. The existing boundary to the adjoining farmland (within the Site) is variably, in places well vegetated or wooded, filtering or screening views to some degree. Therefore, some residents on the northern edge of Toton may have filtered, partial or oblique views of the Proposed Development: within these, new dwellings would be seen at short distance, replacing the current mid-distance views across farmland to Stapleford, the sub-station and the A52 (broadly represented by viewpoint 4). In the long term, the proposed GI directly along the southern boundary would offer some softening / filtering of built form but the nature of these views would remain to be residential where seen.
 - On the southern edge of Stapleford, some select residents would have partial views of the Proposed Development, where dwelling orientation, sufficient elevation, intervening tree cover and surrounding build context allow. Any visibility of the Site is likely to be partial, and seen in the context of their suburban landscape / townscape and existing dwellings immediately beyond the Site in Toton (represented by viewpoint 6).
 - There may also be some long-distance views from properties on relative high ground (represented by viewpoint 12). These views would be partial or marginal, with any visibility of the Proposed Development seen in the wider settled context of Toton and Stapleford.
- 6.4.69. Public Right of Way users: the principal receptors would be those along the footpath crossing the Site. There would also be limited, direct views from along a bridleway passing to the west, as well as partial views from bridleways across farmland to the north-east at mid to long distance.
- Greatest impacts would be experienced by footpath users crossing the Site. Views on the approach are well screened by existing development and associated trees around the sub-station compound and the settled edge of Toton, to the north-east and south-west, respectively. On meeting the Site boundary, there would be direct, immediate views of the Proposed Development, whereby receptors would see open arable views alter to enclosed residential development (viewpoints 3 and 4).
 - Where the bridleways pass west of the Site, views are largely screened by the woodland belt adjoining the boundary. There is however a short section of the PRoW leading from Bessell Lane at short distance to the north-west from along which unimpeded views of proposed open space in the north-west of the Site would be seen, with new housing beyond replacing views of Toton. Open views along the western boundary would remain, via new green space, although new tree planting would soften views into the Site over time.

Landscape and Visual Amenity

- Views of the Proposed Development from PRowS to the north-east between Chilwell and Stapleford would typically be marginal and heavily filtered due primarily to the screening effects of intervening elements such as the Park & Ride, substation compound and school, all with associated vegetation. The Site is further obscured by proximate intervening vegetation (at closer points at lower elevation) and successive landscape elements and distance (at greater elevation). The components likely to be marginally / partially visible would be the removal of trees at the Site access onto the B6003, removal of the pylon, and potential perceptions of new dwellings in the east of the Site.
- Views into the Site from the wider PRow network are very limited, identified only from high unimpeded ground to the north-west beyond Sandiacre. These would be partial and seen in the context of the wider settled extents of the west of Nottingham (viewpoint 13).

6.4.70. Transport receptors: users of the local transport infrastructure with views of the Proposed Development would be essentially limited to the B6003.

- Excluding potential glimpsed or occasional partial views from elevated residential roads orientated towards the Site (to the north or north-west), the key receptor route comprises the B6003. From here, there would be direct, short-range views of new homes and the main access, filtered in part by existing roadside trees.
- The A52 extends in an east-west direction closest to the Site. While heavily filtered views through roadside hedgerows could be possible, where the dual carriageway is not in a cutting, the focus of the view is on the road itself and the flanking vegetation serves to reinforce this.

6.4.71. Recreational receptors: the scope of the visual assessment included Archers Field Recreation Ground. While it is recognized that there would be some impacts on users of this public open space, such effects are not typical – confined to a select relatively elevated area on its northern edge – particularly given that the focus of these users' views is – in any regard – most likely to be upon the recreational activity rather than the contextual landscape. Therefore, in general, it is unlikely that users would see or perceive the Proposed Development.

6.4.72. Any other receptors; such as Bardills Garden Centre, the Park & Ride, and George Spencer School, are considered to have limited – if any – visibility of the proposed development, and where glimpses or marginal views are possible, the focus for these receptors would be upon the activity / business rather than the landscape context.

6.5. Mitigation, Enhancement and Residual Effects

6.5.1. This section describes the measures which are required to mitigate any significant environmental effects.

Mitigation by Design

Overview

6.5.2. It is considered that the approach to mitigation, and the inclusion of a robust landscape and green infrastructure strategy, will lead to a physically and visually well contained Proposed Development which shows clear defensible boundaries and consequently, will be acceptable in landscape and visual terms.

- 6.5.3. The early design of the Proposed Development has been influenced by the landscape and visual constraints and opportunities, which are apparent on the Site and in the surrounding area. During the design stages the masterplan has evolved in response to environmental work and an iterative process of LVIA.
- 6.5.4. This process ensures that the location, scale and character of the Proposed Development has evolved in response to the local landscape character (and relevant constraints and opportunities). The Parameter Plan (**Figure 4.1**) shows the areas of the development envelope subject to a strategy for building heights, and those areas of retained and new green infrastructure, both of which combine to address the local landscape and visual constraints as far as possible.
- 6.5.5. The development framework has undergone some iterations as part of this process, and ensures that a 'landscape led' approach has been considered as part of the design.
- 6.5.6. Adopting this approach has ensured that the preliminary development and landscape strategy incorporates mitigation as an inherent component of the Proposed Development, intending to avoid or reduce the adverse effects of a development proposal.
- 6.5.7. The principles for mitigation measures aim to:
- Conserve and enhance the surrounding landscape/townscape character;
 - Retain and make best use of existing landscape elements and features where possible;
 - Avoid loss or damage to those retained landscape elements and features; and
 - Optimise protection and screening for visual amenity receptors.
- 6.5.8. Together these place a particular emphasis on green infrastructure across the Site (including strategic landscape planting). These aims and principles can be taken forward through an iterative approach to inform an evolving design process at an increasing level of detail through the planning process.
- Mitigation Strategy for Landscape and Visual Matters
- 6.5.9. The components of the landscape and visual strategy that have been incorporated into the emerging proposals are summarised in the following table.

Landscape and Visual Amenity

Table 6.7: Summary of landscape and visual mitigation

Strategy component	Key points	Proposed Development
Development envelope	A development envelope based on existing field patterns and ditch lines / vegetation, consequently reflecting scale and pattern of the landscape in respect of the local context.	✓
	Western extent of Site omits development in order to retain a strong landscape buffer along the Erewash valley, reflecting the existing relationship between the settled edge and the eastern valley slope.	✓
	The development envelope is restricted where required to maintain appropriate stand offs and avoid/minimise impacts upon proximate vegetation, notably the southern and western boundaries.	✓
Existing vegetation strategy	Retain existing vegetation within Site boundaries wherever possible.	✓
	Enhancement proposals to include new tree planting, reinforce existing hedgerows, supplementary hedge planting along the southern boundary strengthen tree belts and improve species diversity and ensure succession.	✓
	In response to any required losses, proposed replacement and additional planting to ensure a net gain in respective vegetation type (e.g. hedgerows).	✓
Green infrastructure	A strategy for landscape planting that will complement and enhance the existing green infrastructure network, including native shrub and planting in the main public open space and incidental green space, and green links along and through the development envelope.	✓
	Incorporate and enhance the existing ditch as part of the GI network	✓
	Diversion of the route of the public right of way crossing the Site around the built edge through new public open space.	✓
	Tree planting within incidental green space throughout the development to introduce green infrastructure into the built area	✓
Environmental considerations	Where appropriate, utilising existing landscape components to inform and guide the drainage strategy, including retention of an existing ditch and a detention basin integrated into the design of the principal area of public open space within the scheme.	✓
	Approaches to existing vegetation and proposed green infrastructure include compatibility with ecological and biodiversity objectives through retaining and enhancing habitats as appropriate.	✓

6.5.10. As noted earlier in this LVIA, a 'landscape led' approach has been adopted from the outset of the planning and design process for the Site, effectively setting the main parameters for development and the strategic design for green infrastructure. The elements set out in the above table reflect this positive approach.

- 6.5.11. Further considerations of mitigation and design have subsequently been developed, these later stages adopting the strategic proposals but evolving them in response to other environmental considerations, such as drainage and biodiversity.
- 6.5.12. The fundamental mitigation in respect of landscape and visual matters, is that defined at a strategic level. This has set the acceptable parameters for the Proposed Development in a manner whereby it can be assimilated as far as possible into the landscape context, rather than being imposed upon it.

Additional Mitigation

Demolition and Construction

- 6.5.13. A Code of Construction Practice (CoCP) included within a Construction Environmental Management Plan (CEMP) will be developed prior to the commencement of construction. The content of this document will aim to promote good Site management and ensure that environmental commitments are adhered to.
- 6.5.14. Measures that could be incorporated into the CoCP to avoid or reduce landscape and visual effects during construction include:
- Site clearance and removal of vegetation on a phased basis to limit the duration of impacts associated with losses of vegetation;
 - Maximising the retention of existing trees and vegetation in the design where possible, including any hedgerow sections along peripheral boundaries;
 - Protection of all existing vegetation proposed for retention for the duration of the construction period (including accommodation works and Site demobilisation) to ensure no vegetation is lost due to poor Site management or construction operations;
 - Replacement of any trees intended to be retained which may be lost unintentionally as a consequence of construction works;
 - A phased programme of planting and early implementation of planting and other landscape measures where there is no conflict with construction activities or other requirements of the Proposed Development;
 - Appropriate maintenance of planting and seeding works and implementation of management measures, to continue through the construction period as landscape works are completed;
 - Strict adherence to the Site boundaries of construction and storage compounds and construction access roads, including the use of well-maintained hoardings and fencing; and
 - Designing construction lighting to avoid unnecessary intrusion onto adjacent buildings and other land uses.

Operation

- 6.5.15. Mitigation measures for landscape and visual matters have been incorporated into the Proposed Development as an integrated part of the design process. It is anticipated that all proposed

Landscape and Visual Amenity

landscape mitigation measures will be in place at completion, however, it should be noted that at the early stages many of the proposed landscape mitigation measures will perform their intended landscape function in the longer term and will require a comprehensive program of establishment maintenance and longer-term landscape management to achieve this.

Table 6.8: Summary of Mitigation

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured		
		By Design	By S.106	By Condition
1	Appropriate spread and height of the development envelope within the Site as demonstrated on the Parameter Plan.	X		X
2	Retention of existing structural vegetation including hedgerows and trees along the Site boundaries wherever possible as demonstrated on the Parameter Plan.	X		X
3	Introduction of a new areas of green infrastructure (including new structural planting) as demonstrated on the Parameter Plan.	X		X
4	Additional structural planting where possible including the introduction of individual tree planting, native shrub areas and ecological grassland areas as demonstrated on the Illustrative Landscape Masterplan.	X		X
5	Areas of drainage attenuation areas set within open space.	X		X
6	High quality landscape scheme and detailed design.			X
7	Appropriate maintenance and management for existing, retained, and proposed green infrastructure to secure high quality environmental framework in the long term.		X	X
8	Code of Construction Practice (CoCP) included within a Construction Environmental Management Plan (CEMP)			X

Enhancements

- 6.5.16. Enhancements can be achieved through the adoption of a landscape management plan for the Proposed Development which sets out a series of appropriate aims and objectives.
- 6.5.17. As enhancement measures these would need to address those retained elements and feature of the landscape and ensure these are improved in terms of extent and condition, and with reference to guidelines set out in landscape character documents.

- 6.5.18. Together these will improve the quality of the landscape in terms of its development (both visually and physically), its content (wildlife and habitat creation) and its diversity (opportunities for creation of additional landscape elements, such as ditches, water bodies, or new tree groups).
- 6.5.19. The duration of the management plan may vary covering 5, 10 or 15 years, and the management approaches would vary dependent upon the aims and objectives.

Residual Effects

- 6.5.20. In relation to the landscape character, over time the proposed landscape planting strategy will have established sufficient to help further integrate the Proposed Development into the surrounding landscape character.
- 6.5.21. Given that landscape mitigation is embedded in the design, residual landscape and visual effects effectively represent those effects in the longer term once mitigation is established (i.e. Year 15 in reference to the judgements in this LVIA).
- 6.5.22. The assessment of impacts on landscape character has determined that the significance of effect on 'SHO60: Beeston and Stapleford Urban Fringe' will be 'negligible adverse' at completion (not significant), and remaining so into the longer term (not significant). The significance of effect on 'NCO1: Erewash Valley Corridor' will be 'negligible adverse' at completion (not significant), reducing to Negligible Neutral the longer term (not significant) as the proposed structural landscape planting along the western boundary establishes and matures, reinforcing the existing enclosure provided by tree belts adjoining the western boundary.
- 6.5.23. At a finer scale of assessment, in respect of the Site and its local context, the assessment of impacts on landscape character has determined the significance of effect to be 'moderate adverse' at completion (significant). While there would be some additional beneficial impacts arising from the establishing of the proposed planting and maturing of the Site's landscape structure, the effects on balance are assessed to remain as 'moderate adverse' in the longer term (not significant).
- 6.5.24. In respect of views and visual amenity, the LVIA concludes that, of the receptors assessed, only those PRoW receptors along and extending through the Site, and road users directly passing the access would have residual visual effects that are significant. For receptors along other nearby and approaching PRoWs, and in local and wider landscape context, visual effects are not considered to be significant in the longer term.
- 6.5.25. Balancing those considerations in relation to visual effects, given it would be expected that 'on site' would have such a considerable change in view, the visual effects overall (on balance) are not considered to be significant.
- 6.5.26. With regard to designations, the Site does not fall within or lie directly adjacent to the Bramcote CA, indeed the Site is at long distance with no identified intervisibility. Consequently, there would be no impacts upon its identified physical characteristics, visual context or built character, and perceived impacts to the CA's setting are not considered to be likely.

6.6. Cumulative and In-Combination Effects

- 6.6.1. Chapter 2 'Assessment Scope and Methodology', sets out the details for projects that have been agreed with the LPA through the Scoping process relating to other developments potentially resulting in cumulative significant effects. Those proposed for consideration in terms of cumulative effects are summarised below:

Landscape and Visual Amenity

- Land at Toton North: 880 dwellings, local centre, education provision, a link road onto the A52 and a country park. Site is approximately 59.6Ha, of which 46.6Ha would comprise development (built form and infrastructure)
- Land at Toton East: up to 160 dwellings with open space and infrastructure, with access off B6003 (Toton Lane)
- Southfields Farm, Common Lane, Bramcote (Application Ref.: 24/00066/FUL) – Two BESS facilities within a single compound of approximately 4.4Ha (of which 2.45Ha comprises the compound and associated built development), accessed off Common Lane

In-Combination Effects

In-Combination Landscape Effects

- 6.6.2. In-combination effects are those combined effects of the Proposed Development together with other proposed developments.
- 6.6.3. With regard to landscape features, in broad terms there will inevitably be some cumulative adverse effects on the basis that the Proposed Development and a scheme at Toton East, Toton North or Southfields Farm are likely, to a greater or lesser extent, to require the removal of existing features and resources, including farmland, hedgerows and trees. This will be balanced by the delivery of new green infrastructure schemes proposed for each of the projects. As the new landscape strategies for the development sites establish and mature over time, any such adverse cumulative effects are likely to reduce.
- 6.6.4. Land at Toton North:
- With regard to landscape features, Toton North lies to north-east, separated by Toton East. Within both projects the vegetation forming or adjoining the respective boundaries is to be predominantly retained. There will inevitably be some cumulative adverse effects considering the scale of Toton North, the situation of built form particularly within its southern extents, and the removal of existing features and resources, including farmland, hedgerows and trees within closest proximity to the Site. This will however be balanced by the delivery of new green infrastructure schemes which would establish and mature over time, reducing adverse cumulative effects, particularly as a consequence of the country park proposals across the northern portion of Toton North which includes extensive areas of structural landscape planting.
 - With regard to landscape character, at the district level of assessment Toton North lies largely within the Sherwood DPZ 'SH060 Beeston and Stapleford Urban Fringe', and marginally within SH061: Bramcote Wooded Hills. As the Site lies beyond the scope of the defined DPZs in the District-level character assessment, any further impacts upon this DPZ would be as a result of perceived (indirect) impacts upon its character and setting. In the GNLCA it is noted that this landscape of DPZ SH060 is "heavily influenced" by the urban environment: given Toton North (and more notably, the developable area within it) sits in the southern portion of the DPZ away from the wider DPZ between Stapleford and Beeston, and the Site sitting to the south-west of this between Toton North and the existing settlement edge, there is considered to be limited further indirect impact upon SH060 considering the projects cumulatively. Consequently, any likely inter cumulative landscape effects are not considered to be significant.

- Toton North is not in close proximity to DPZ NCO1, or considered to form part of its local setting, furthermore being separated from it by the Site. There are therefore not considered to be any impacts upon the 'Erewash Valley Corridor' further to those as a result of the delivery of the Site, considering the projects cumulatively.
- Equally, in terms of SHO61, the assessment did not consider the Site to potentially impact upon this DPZ. Furthermore, the Site is separated from this DPZ by Toton North.

6.6.5. Land at Toton East:

- Cumulative adverse effects in terms of landscape features beyond those reported for the Proposed Development within the local landscape would be limited given the retention of the majority of internal and boundary vegetation within the Toton East scheme, and minimal presence of internal features across the proposed developable area within the Site (despite the scale of this project) and utilisation of existing breaks in hedgerows to provide access. Taken together, there would nevertheless require the removal of some existing features and resources, including farmland, select hedgerow sections and trees. Through the delivery of the landscape strategies as proposed, however, there is the potential for an increase in structural landscape planting on balance, mitigating the adverse impacts associated with the built form associated with the two schemes on completion. As the new green infrastructure strategies for the development sites establish and mature over time, any such adverse cumulative effects are likely to further reduce.
- With regard to landscape character, at the district level of assessment Toton East is not defined within any of the DPZs, although it lies adjacent to the Sherwood DPZ 'SHO60 Beeston and Stapleford Urban Fringe'. Consequently, any further impacts upon this DPZ arising from the delivery of both projects would be as a result of perceived (indirect) impacts upon its character and setting. In the GNLCA it is noted that this landscape is "heavily influenced" by the urban environment, and both schemes sits immediately adjacent to the settled edge, with open space retained to the adjoining countryside within Toton East to DPZ SHO60. Therefore there is considered to be limited impact upon the 'Beeston and Stapleford Urban Fringe' and any likely inter cumulative landscape effects are considered to be not significant.
- Toton East is not in close proximity to DPZ NCO1 or considered to form part of its local setting. The landscape in which Toton East is situated is both largely visually removed and has a sense of physical separation from the river valley. Taking into consideration that they are additionally separated by the Site, there is therefore not considered to be any further impact upon the 'Erewash Valley Corridor' as a result of the delivery of the Site, considering the projects cumulatively.

6.6.6. Southfields Farm:

- At Southfields Farm proposals are contained to the extents of a single field parcel, the boundary features of which are to be retained and an existing track used for access. There would be some loss of farmland to deliver the BESS, as well as an area of tree planting across what is currently rough grassland. While there would be some change to landscape features as a consequence of both projects, this would be limited in extent and introduce new planting that is reflective of existing landscape features in the project's immediate context.

Landscape and Visual Amenity

- In character terms, the two schemes are physically at long distance from one another, and lie within – or adjacent to – different landscape character areas. It is therefore considered that there would be no new or additional significant impacts upon the identified character areas beyond those already identified as a result of both projects coming forward.

In-Combination Visual Effects

6.6.7. A cumulative ZTV has been produced to illustrate the areas from which proposed development within the Site and indicative development in Toton East and West could potentially be visible (**Figure 6.7 Combined ZTV**). The extent of visibility of the schemes combined is broadly comparable to that of the Site itself, however, the locations from which both schemes could be viewed cumulatively would be restricted due to the surrounding settled context, topography and the development distribution in relation to both the urban edge and each other. Principal receptors would comprise those represented by Viewpoints 1 and 2.

6.6.8. Toton East:

- Principal receptors would comprise those travelling along the B6003 – where both project boundaries meet this road opposite each other – and at long distance from highest ground to the north, represented by Viewpoints 1 and 2, and 11, respectively.
- Receptors along the footpath to the west of the B6003 travelling east would observe the Proposed Development, after which there is likely to be a short section from along which neither the Proposed Development nor Toton East are readily observed where passing the substation, despite the short distance between them.
- Road users along the B6003 (viewpoint 2) would experience cumulative views in succession. The B6003 is already largely developed, enclosed by built form to either side. Any views would be direct and filtered by roadside trees but transient. Consequently, while there would briefly be significant visual adverse impacts where passing both projects to either side, overall, in the context of the journey along this route taken by these road users together with its existing built context there are not considered to be significant cumulative visual effects upon these receptors as a result of the Proposed Development.
- In relation to viewpoint 11; from the wider elevated landscape to the north of the Site; the potential for any views of the Proposed Development in combination with Toton East is considered to be very limited due to distance, intervening vegetation (particularly either side of the B6003 and around the Garden Centre and Park & Ride) and the falling nature of the topography from the plateau farmland that the PRow crosses (that Viewpoint 11 represents). Toton East is partially obscured, and while the Site is also, there is the potential for marginal (albeit barely perceptible) change along the skyline associated with select vegetation removal along the B6003 at the Site's access. Such impacts are however not considered to be significant.
- From other viewpoints, development within Toton East and other landscape features are assessed to obscure potential views of the Proposed Development, such as along footpaths approaching and through Toton East (Viewpoint 7 and 8) and from along footpaths across farmland to the north of the Site (Viewpoints 9 and 10), or vice versa where the development within the Site itself would obscure any views towards Toton East, such as from footpaths north of Toton (between Viewpoints 3 and 4).

6.6.9. Toton North:

- Receptors along the footpath to the west of the B6003 (Viewpoint 4) would observe the Proposed Development but on reaching the B6003 any potential views of Toton North would be obscured by Toton East. There would therefore be no cumulative visual effects upon these receptors as a result of the Proposed Development.
- Equally, any potential transient successive views of the Site and Toton North from along the B6003 as represented by Viewpoint 1 would also be screened by development within Toton East.
- In relation to viewpoint 10 in the wider landscape to the north of the Site, the potential for any views of the Proposed Development in combination with Toton North is considered to be very limited, if visible at all, due to distance, intervening vegetation (particularly along the B6003 and around the Garden Centre and Park & Ride) and the falling nature of the topography.

6.6.10. Southfields Farm:

- Should Toton North or Toton East be delivered, there are not predicted to be any identified cumulative visual impacts as a result of this scheme and the Proposed Development, as both other cumulative schemes lie between – and essentially separate – development at the two locations.
- Solely considering the Site and Southfields Farm together, cumulative impacts may be experienced from Common Lane (viewpoint 10). The long-term change potentially observed from here with regard to the Southfields Farm project would focus on woodland planting within the south of its boundaries. The two schemes would be seen in succession; with any heavily filtered glimpses of woodland to the north through the existing hedgerow and any marginally perceived change to the settled edge seen at long distance within the view between tree canopies to the south. Any likely inter cumulative visual effects are considered to be not significant.

6.6.11. In summary, any likely inter cumulative visual effects are in general considered to be not significant, with the exception of receptors travelling along the B6003 who would – as a result of the delivery of both Toton East and the Site – be subject to fleeting significant effects over a limited proportion of their journey where they pass between the two projects.

Intra Cumulative effects

6.6.12. Intra-cumulative effects are those combined effects of the Proposed Development with other environmental effects on a common receptor.

Intra Cumulative Landscape Effects

6.6.13. With regard to landscape effects, the Proposed Development will necessitate the removal of select areas of existing vegetation, as well as some changes to the topography on the Site. As such, there are likely to be some cumulative effects in respect of ecological impacts. These will be site-specific however, and likely to be offset by the biodiversity net gain for the Proposed Development, which is set out in the Ecology Chapter, which concludes that through a combination of maximising retention of existing habitats of value and creation of green space, the provision of habitat would improve upon the existing network of habitats and connectivity locally to the benefit of biodiversity.

6.6.14. As such, any likely intra cumulative landscape effects are considered to be not significant.

Landscape and Visual Amenity

Intra Cumulative Visual Effects

- 6.6.15. With regard to visual receptors, occupiers of residential properties in close proximity to the Proposed Development may also be subject to adverse noise impacts, in combination with visual impacts.
- 6.6.16. The Noise and Vibration assessment (Chapter 11) identifies the most sensitive receptors from a noise and vibration perspective, including the residential properties adjoining the Site and in the surrounding area. Overall, Chapter 11 concludes that residual noise effects are no greater than Negligible in terms of operational road traffic noise and minor to moderate adverse for external building services noise (not significant).
- 6.6.17. Of these receptors, the LVIA set out in this Chapter considers that the visual receptors subject to greatest levels of impacts comprise a modest number of residential receptors overlooking the Proposed Development along the north-eastern edge of Chilwell to be subject to up to moderate adverse residual visual effects (not significant).
- 6.6.18. In summary, whilst some occupiers of residential properties will experience both adverse visual effects and adverse noise effects; given the level of those effects, on balance, any likely intra cumulative effects in respect of visual receptors are considered to be not significant overall.

6.7. Summary

Introduction

- 6.7.1. Pegasus Group has prepared this landscape and visual impact assessment in relation to the Proposed Development of land at Toton West, Toton (referred to as 'the Site').
- 6.7.2. The approach and methodology used in this chapter has been developed in accordance with industry guidance; the 'Guidelines for Landscape and Visual Impact Assessment', published by the Landscape Institute and Institute for Environmental Management and Assessment, 2013.

Baseline Conditions

- 6.7.3. The Site is located on a south-westerly suburb of the city of Nottingham, close to the boundary between Nottinghamshire and Derbyshire. and associated rail infrastructure. Further arable land lies directly to the north.
- 6.7.4. The Site comprises two field parcels adjoining the northern settled edge of Toton and the majority of a third extending to the north-west, all in arable use. Internal features are limited to a ditch between the western and north-western field parcels, and two pylons with overhead powerlines.
- 6.7.5. The Site boundaries are defined by trees and scrub to the west between the Site and the Toton Sidings, Toton to the south (in part comprising a field hedgerow and small linear woodland block at the western end of the residential edge), the B6003 to the east, the wooded compound of an electricity substation set into the north-east corner, and a hedgerow flanked on the internal side by a ditch along much of the north. Where not defined by a tree belt, the north-western section is open to the remainder of the field parcel not occupied by the Site.
- 6.7.6. The wider landscape around the Site consists of the broader settlement areas associated with Toton, Stapleford, Long Eaton and Sandiacre with open countryside to the north of Stapleford beyond.

- 6.7.7. The topography of the wider landscape is varied, but is principally governed by the Rivers Erewash and Trent, which fall broadly to the west and south, respectively. Land within the Site slopes generally in a westerly direction. There are a number of Public Rights of Way (PRoWs) across or adjoining the Site, comprising both footpaths and bridleways.
- 6.7.8. The Site is located within Sherwood National Character Area (NCA49), the Regional LCT 10.b Sandstone Forests Landscape Character Type, and at the District Level it lies adjacent to the 'Erewash River Corridor' Draft Policy Zone (DPZ NC01). To the north-east on higher ground is 'Beeston and Stapleford Urban Fringe' (DPZ SHO60). From the detailed evaluation undertaken for this LVIA, the immediate context to the Site shares some characteristics identified in the baseline landscape character assessments and given its settlement fringe location is most closely aligned with the characteristics of the landscape described at District level. No long-term significant effects were identified upon the character of the Site directly, or indirectly upon the identified district-level landscape character areas.
- 6.7.9. In visual terms, due to its urban fringe context, vegetation and built form to the east and north-east, and the sloping nature of the landform broadly to the west into the Erewash valley, the Site is largely well contained with generally limited extents in terms of potential visibility towards the Site from beyond the local context. Principal receptors comprise PRoW users within and approaching the Site at short distance, residents adjoining the southern Site boundaries, and road users along the B6003.

Likely Significant Effects

- 6.7.10. Given the settled edge context of the Site and the degree of influence from urbanizing elements, together with distribution of green infrastructure and open space throughout the development, the Proposed Development is not considered to result in any significant direct or indirect residual effects upon the character of the landscape.
- 6.7.11. The majority of views assessed as subject to the highest magnitudes of impact and significance of effect are from locations within the Site itself, or directly adjacent to the Site. There would therefore be significant effects upon users of the PRoW along a section of the public footpath as it passes along and through the Site, and upon receptors along the B6003 where they briefly pass the Site access. Such effects are therefore considered to be localized in nature, being limited in extent to receptors passing through and in immediate proximity to the Proposed Development.
- 6.7.12. The assessment considered potential impacts upon the Bramcote Conservation Area, The Site does not lie within or in close proximity to the CA, and no intervisibility was identified, including that consistent with the CA's special characteristics. The Site is screened from the CA by tree cover, both intervening and within the south of the CA itself.
- 6.7.13. Considering cumulative impacts, in general significant effects upon either the landscape or visual resource are not predicted, with the exception of receptors along the B6003 passing both Toton East and the Site simultaneously. From along this section of the route along the road, both the Proposed Development and Toton East would be experienced, either in combination or sequentially, at short / immediate distance and altering the existing views from open farmland to enclosed residential development with existing and replacement roadside tree planting and hedgerow (to west and east, respectively).

Landscape and Visual Amenity

Mitigation

- 6.7.14. The mitigation strategy for the Proposed Development focuses on integrating the Proposed Development into the surrounding landscape through a robust landscape and green infrastructure strategy. The design process has been influenced by landscape and visual constraints to ensure that the Proposed Development respects the local context, with careful attention to scale, character, and vegetation retention.
- 6.7.15. Key mitigation measures include conserving the landscape character, retaining and enhancing existing vegetation, and incorporating substantial green infrastructure such as tree planting and enhancement proposals to strengthen tree belt, reinforce existing hedgerow and improve species diversity.
- 6.7.16. Sustainable drainage strategies and compatible ecological enhancements are also integral to the design. During construction, a phased approach will minimise vegetation loss, and construction lighting will be managed to avoid intrusion. Post-construction, long-term landscape management will ensure the success of mitigation measures, with a flexible management plan focusing on enhancing biodiversity, visual quality, and environmental sustainability.
- 6.7.17. A Code of Construction Practice (CoCP) included within a CEMP will be developed prior to the commencement of construction. The content of this document will aim to promote good Site management and ensure that environmental commitments are adhered to.

Conclusion

- 6.7.18. There would be an inherent degree of landscape and visual impact for any largely undeveloped settlement edge site seeking to deliver new residential development of this nature, although given the extent of influence from the settled edge and urbanising elements in the landscape, such impacts would be less than those relating to a site that has no existing urban influences.
- 6.7.19. The mitigation measures delivered as part of the design of the Proposed Development and described within this report have sought to address the likely effects in order to avoid, reduce or offset adverse impacts wherever possible.
- 6.7.20. The Proposed Development would give rise to some significant residual visual effects, however, these would be localized and principally focused within and adjoining the Site upon receptors of higher sensitivity. This is often the case with any proposed development on greenfield land.
- 6.7.21. **Table 6.9** provides a summary of effects, mitigation and residual effects.

Table 6.9: Summary of Effects, Mitigation and Residual Effects

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction								
SH060: Beeston and Stapleford Urban Fringe	Landscape	Temporary Indirect	Medium	Negligible	Borough / District	-	Integrated mitigation by design	Negligible adverse (Not significant)
NCO1: Erewash Valley Corridor	Landscape	Temporary Indirect	Medium	Negligible	Borough / District	-	Integrated mitigation by design	Negligible adverse (Not significant)
Site and immediate context	Landscape	Temporary Direct	High	Medium to High	Local	-	Integrated mitigation by design	Moderate to major adverse (Significant)
1. B6003, between Toton Park & Ride and A52 roundabout	Visual; partial, transient	Temporary Direct	High	Negligible / Low	Local	-	Integrated mitigation by design	Minor Adverse (Not significant)
2. From B6003 at the northern edge of Toton	Visual; full, transient	Temporary Direct	High	Medium / High	Local	-	Integrated mitigation by design	Moderate / Major Adverse (Not significant)
3. PRoW from B6003 at NE corner of the Site, towards Toton	Visual; full, transient	Temporary Direct	Medium / High	High	Local	-	Integrated mitigation by design	Major Adverse (Not significant)
4. PRoW on the edge of Toton Field LNR at the SW corner of the Site	Visual; full, transient	Temporary Direct	High	Medium / High	Local	-	Integrated mitigation by design	Moderate / Major Adverse (Significant)

Landscape and Visual Amenity

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
5. PRoW joining Bessell Lane, near NW corner of the Site	Visual; full, transient	Temporary Direct	High	Medium	Local	-	Integrated mitigation by design	Moderate Adverse (Not significant)
6. PRoW through Archers Field Recreation Ground	Visual; marginal, transient	Temporary Direct	High	Negligible / Low	Local	-	Integrated mitigation by design	Minor adverse (Not significant)
7 PRoW from B6003 to Stapleford, east of the tram stop	Visual; partial, heavily filtered, transient	Temporary Direct	High	Negligible / Low	Local	-	Integrated mitigation by design	Minor adverse (Not significant)
8. PRoW between Inham Road and Baulk Lane	Visual; glimpse, transient	Temporary Direct	High	Negligible	Local	-	Integrated mitigation by design	Negligible / Minor adverse (Not significant)
9. PRoW along Baulk Lane south-west of Southfields Farm	Visual; glimpse, transient	Temporary Direct	Medium	Negligible	Local	-	Integrated mitigation by design	Negligible / Minor Adverse (Not significant)
10. PRoW along Common Lane west of Southfields Farm	Visual; partial, transient	Temporary Direct	High	Negligible	Local	-	Integrated mitigation by design	Negligible / Minor adverse (Not significant)
11. PRoW between Stapleford and Common Lane / Baulk Lane	Visual; marginal, transient	Temporary Direct	Medium	None / Negligible	Local	-	Integrated mitigation by design	Negligible adverse (Not significant)

Environmental Statement

Landscape and Visual Amenity

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
12. St Giles' Church, Sandiacre	Visual; partial, direct	Temporary Direct	Medium	Negligible	Local	-	Integrated mitigation by design	Negligible adverse (Not significant)
13. PRoW off No Man's Lane towards Risley	Visual; partial, transient	Temporary Direct	High	Negligible	Local	-	Integrated mitigation by design	Negligible / Minor Adverse (Not significant)
Operation								
SH060: Beeston and Stapleford Urban Fringe	Landscape	Permanent Indirect	Medium	Negligible	Borough / District	Negligible Adverse	Replanted trees along B6003, new development well related to existing edge of Toton	Negligible Adverse (Not significant)
NC01: Erewash Valley Corridor	Landscape	Permanent Indirect	Medium	Negligible	Borough / District	Negligible Adverse	POS in west, new tree planting along west boundary	Negligible Neutral (Not significant)
Site and immediate context	Landscape	Permanent Direct	Medium	Medium to High	Local	Moderate Adverse	Western built line reflects edge of Toton, POS in west and north-west, retained boundary features, tree replacement	Moderate Adverse (Not significant)
1. B6003, between Toton Park & Ride and A52 roundabout	Visual; partial, transient	Permanent Direct	High	Negligible / Low	Local	Negligible / Minor Adverse	As per chapter mitigation section	Negligible Neutral (Not significant)

Landscape and Visual Amenity

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
2. From B6003 at the northern edge of Toton	Visual; full, transient	Permanent Direct	High	Medium / High	Local	Moderate Adverse	As per chapter mitigation section	Moderate Adverse (Not significant)
3. PRoW from B6003 at NE corner of the Site, westwards towards Toton	Visual; full, transient	Permanent Direct	Medium / High	High	Local	Major Adverse	As per chapter mitigation section	Major Adverse (Significant)
4. PRoW on the edge of Toton Field LNR at the SW corner of the Site	Visual; full, transient	Permanent Direct	High	Medium / High	Local	Moderate / Major Adverse	As per chapter mitigation section	Minor / Moderate Adverse (Not significant)
5. PRoW joining Bessell Lane, near NW corner of the Site	Visual; full, transient	Permanent Direct	High	Medium	Local	Moderate / Major Adverse	As per chapter mitigation section	Minor / Moderate Adverse (Not significant)
6. PRoW through Archers Field Recreation Ground	Visual; marginal, transient	Permanent Direct	High	Low	Local	Minor / Moderate adverse	As per chapter mitigation section	Minor adverse (Not significant)
7 PRoW from B6003 to Stapleford, east of the tram stop	Visual; partial, heavily filtered, transient	Permanent Direct	High	Negligible	Local	Negligible adverse	As per chapter mitigation section	Negligible adverse (Not significant)
8. PRoW between Inham Road and Baulk Lane	Visual; glimpse, transient	Permanent Direct	High	Negligible	Local	Negligible Neutral	As per chapter mitigation section	Negligible Neutral (Not significant)

Environmental Statement

Landscape and Visual Amenity

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
9. PRoW along Baulk Lane south-west of Southfields Farm	Visual; glimpse, transient	Permanent Direct	Medium	Negligible	Local	Negligible Neutral	As per chapter mitigation section	Negligible Neutral (Not significant)
10. PRoW along Common Lane west of Southfields Farm	Visual; partial, transient	Permanent Direct	High	Negligible	Local	Negligible Neutral	As per chapter mitigation section	Negligible Neutral (Not significant)
11. PRoW between Stapleford and Common Lane / Baulk Lane	Visual; marginal, transient	Permanent Direct	Medium	None / Negligible	Local	Nil / Negligible neutral	As per chapter mitigation section	Nil / Negligible neutral (Not significant)
12. St Giles' Church, Sandiacre	Visual; partial, direct	Permanent	Medium	Negligible		Negligible adverse	As per chapter mitigation section	Negligible neutral (Not significant)
13. PRoW off No Man's Lane towards Risley	Visual; partial, transient	Direct	High	Negligible		Negligible / Minor adverse	As per chapter mitigation section	Negligible adverse (Not significant)
Cumulative and In-Combination								
SH060: Beeston and Stapleford Urban Fringe	Landscape	Permanent Direct & Indirect	Medium	Low/ Medium	Borough / District	-	Integrated mitigation by design	Moderate Adverse (Not significant)
NC01: Erewash Valley Corridor	Landscape	Permanent Direct	Medium	Negligible	Borough / District	-	Integrated mitigation by design	Negligible Adverse (Not significant)

Landscape and Visual Amenity

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
B6003 between A52 and Toton residential edge (VP 1&2)	Visual; full, transient	Permanent Direct	Medium	Between Minor and Major Adverse	Local	–	Integrated mitigation by design	Up to Moderate / Major Adverse (Significant)
PRoW Stapleford to Chilwell near Windmill Hill (VP 11)	Visual; glimpse, transient	Permanent Direct	High	Negligible	Local	–	Integrated mitigation by design	Negligible Adverse (Not significant)