Planning Application for a Battery Storage System with Associated Infrastructure
Land North of Rayleigh Spur Roundabout, Basildon

Landscape & Visual Assessment

PREPARED BY PEGASUS GROUP ON BEHALF OF RENEWABLE ENERGY SYSTEMS LIMITED | JUNE 2025 | P24-3044-EN-R001-V3

PEGASUS GROUP

CONTENTS

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1. INTRODUCTION

1.1 This Landscape and Visual Assessment (LVA) has been prepared on behalf of Renewable Energy Systems Limited (RES) by Pegasus Group. It relates to three agricultural fields in between the A127 to the north, the A1245 to the east, the A130 to the west and the Rayleigh Spur Roundabout to the south, as well as linear areas of land to the west of the A130. The Site is close to a number of settlements, including Basildon and North Benfleet to the south-west, Wickford to the north-west, Rayleigh to the north-east and South Benfleet to the south. The location of the Site is shown on Figure 1.

1.2 This LVA considers the Site and its surrounding context in both landscape and visual terms, to assess the potential effects of the proposed battery storage installation upon:

- Landscape features;
- Landscape character; and
- Visual amenity.

1.3 This assessment has been guided by the assessment criteria set out in Appendix 1. It should be noted that all of the landscape and visual effects stated within assessments such as this are considered adverse unless stated otherwise. It should also be noted that all effects are considered direct, long-term but non-permanent unless otherwise stated.

1.4 The assessment has been prepared through a desk study analysis of the Site and its policy context to gain an appreciation of the landscape and visual context of the Site.

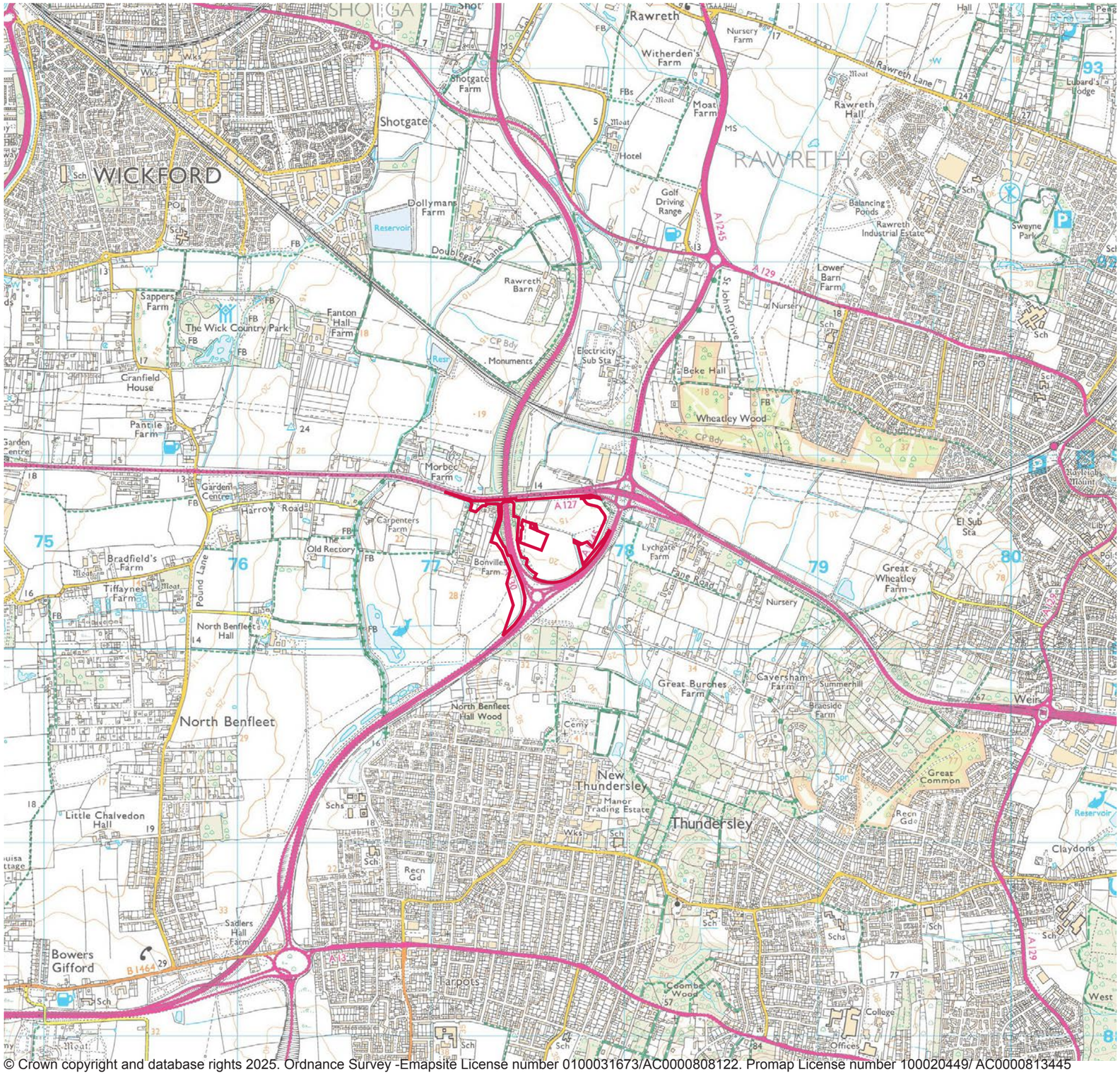


Figure 1: Site Location and Surroundings

2. METHODOLOGY

Published LVA Guidance

2.1 The LVA has been undertaken in accordance with the principles of best practice, as outlined in published guidance documents listed in the reference section of this report, notably the third edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA3), (Landscape Institute and the Institute for Environmental Management and Assessment, 2013).

2.2 The methodology and assessment criteria for the assessment have been developed in accordance with the principles established in this best practice document. It should be acknowledged that GLVIA3 establishes guidelines, not a specific methodology. The preface to GLVIA3 states:

'This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.'

2.3 The approach set out below and in detail in Appendix 1 has therefore been developed specifically for this assessment to ensure that the methodology is fit for purpose.

Distinction between Landscape and Visual Effects

2.4 In accordance with the published guidance, landscape and visual effects were assessed separately, although the procedure for assessing each of these is closely linked. A clear distinction has been drawn between landscape and visual effects as described below:

- Landscape effects relate to the effects of the indicative proposals on the physical and perceptual characteristics of the landscape and its resulting character and quality; and
- Visual effects relate to the effects on specific views experienced by visual receptors and on visual amenity more generally.

Types of Landscape and Visual Impacts Considered and Duration

2.5 The LVA assesses both the effects of the development and the temporary effects associated with its construction. Consideration has been given to seasonal variations in the visibility of the development and these are described where necessary.

2.6 Both beneficial and adverse effects are identified in the assessment and reported as appropriate. Where effects are described as 'neutral' this is where beneficial effects are deemed to balance the adverse effects. The adverse and beneficial effects are communicated in each case so that the judgement is clear.

2.7 Long-term landscape and visual effects of the project have not been specifically assessed. Therefore, in addition to those during construction, visual effects are assessed in winter conditions at Year 1 only (the year in which the development is completed).

Assumptions and Limitations of the Assessment

Baseline Information

2.8 The baseline landscape resource and visual receptors were identified in part through a desk based study of Ordnance Survey mapping, published landscape character studies, relevant planning policies, interrogation of aerial photography and site visits undertaken from 2022 onwards.

3. SITE CONTEXT

3.1 The main part of the Site is made up of three agricultural fields between the settlements of Wickford, Rayleigh, Basildon and South Benfleet. It is surrounded by roads on all sides including the A127 dual carriageway to the north, A1245 dual carriageway to the south and east and the A130 dual carriageway to the west. The Site also extends beyond the A130 to the west of the road and extends further to the south before meeting the same road close to the edge of South Benfleet.

3.2 The A127 dual carriageway is elevated in comparison to the main part of the Site to the north-east, as is the A130 dual carriageway to the north-west, which in combination with the mature vegetation aligning the roads, provide visual enclosure. Industrial development is located beyond the A127 to the north-east of the Site, with scattered industrial development located amongst agricultural fields to the south-east. The Site to the west of the A130 lies close to agricultural farm complexes and industrial development, located along Bonvilles Cottages private road, which is also public right of way (PROW). The Shenfield to Southend railway line lies further to the north, with the Rayleigh Substation beyond. Overhead powerlines cross the main part of the close to the A130.

3.3 A photographic record of views toward the Site and its local context is provided in Appendix 2, with the photographic locations illustrated by Figure 11. Due to health and safety related issues, parts of the road network were driven but photography was not taken. In these cases, representative Google Earth Street View Images have been used, which is indicated on the relevant photography.

4. DESIGNATION AND POLICY CONTEXT

4.1 This section provides an overview of the policies and designations of particular relevance to landscape and visual issues. Figures 2 to 3 illustrate relevant designations within the locality of the Site. The Site is located within the administrative boundaries of Basildon District Council.

Landscape Designations

4.2 The Site is not covered by any national, regional or local landscape designations, however sits within Green Belt.

4.3 There are no listed buildings on the Site, however, a number are located close to the Site and are illustrated by Figure 2. There are no scheduled monuments or registered parks and gardens within or close to the Site.

4.4 There are no PROW within the Site. There are a number of other public rights of way surrounding the Site with their locations shown on Figure 3.

Relevant Landscape Planning Policy

National Planning Guidance

4.5 Government revised the National Planning Policy Framework (NPPF) in December 2024. This document sets out a general presumption in favour of sustainable development (paragraph 11) and guides the Local Planning Authorities in the production of Local Plans and in decision making.

4.6 In Section 14, the NPPF sets out its support for renewable and low carbon energy and associated infrastructure, with subsequent paragraphs setting out how this can be achieved.

4.7 Paragraph 187 of the NPPF in relation to valued landscapes, states:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland...'.

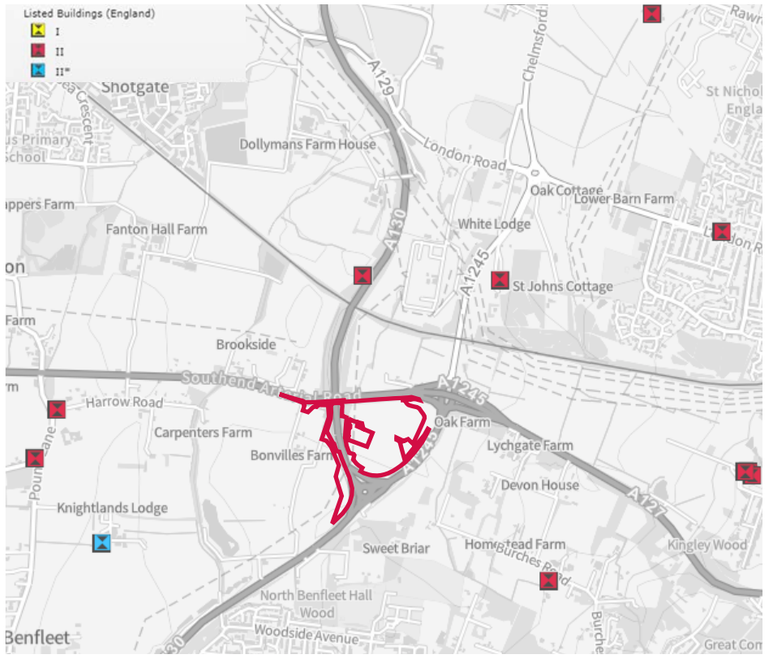


Figure 2: Extract from Magic Map showing listed buildings in proximity to site (site location shown by red line)

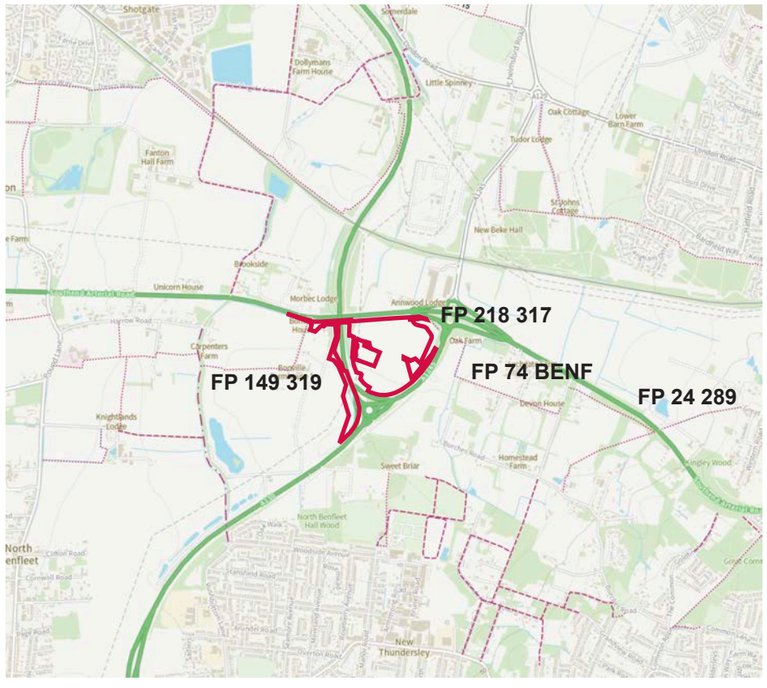


Figure 3: Extract from Essex County Councils interactive mapping, with relevant PROW numbers added (site location shown by red line)

Local Planning Policy

4.8 The Basildon District Local Plan Saved Policies, September 2007 includes saved policies covering the district. Basildon District Council are currently in the process of updating their local plan, with the Basildon Borough Local Plan 2023-2043 at the preferred options stage.

5. PROPOSED DEVELOPMENT

5.1 The proposed development comprises a battery energy storage system (BESS) with associated infrastructure. The proposed development would consist of the following:

- Power Conversion Systems and Transformers (8.1m x 2.4m x 2.4m)
- BESS Substation Building (10m x 5m x 4.5m)
- DNO Substation Building (15m x 10m x 3.6m)
- Auxiliary Transformer (3.1m x 2.5m x 2.1m)
- Harmonic Filter (6.02.2m x 3.02m x 2.7m)
- Pre-Insertion Resistor (3.3m x 2.7m x 2.7m)
- Capacitor Bank (6.4m x 2.8m x 2.6m)
- LV Feeder Pillar and Aggregation Panel (2.3m x 1.1m x 2m)
- LV Switchgear Room (7m x 3.5m x 3m)
- Spare Container (12.2m x 2.4m x 2.9m)
- Security (incl provision of 4m CCTV cameras [only with coverage of the site area. Not externally facing])
- Security Fencing (up to 3m high)
- Acoustic Fencing (up to 4m high)

5.2 Access to the site will be obtained from the A1245 slip road to the A127 via the existing access to be modified and retained.

5.3 Care has been taken to retain existing trees and hedgerows where possible, to retain the character of the local area, to maintain existing

6. LANDSCAPE BASELINE AND EFFECTS

6.1 The assessment of Landscape Effects deals with the changes to the landscape as a resource. Different combinations of the physical, natural and cultural components (including aesthetic, perceptual and experiential aspects) of the landscape and their spatial distribution create the distinctive character of landscapes in different places.

6.2 Effects are considered in relation to both landscape features and landscape character during construction and at Year 1. The sensitivity of landscape features is a function of both their susceptibility and value, as discussed further in the Assessment Criteria at Appendix 1. A summary of landscape effects are included in Table 1.

Landscape Features

Landform and Topography

6.3 The land within the main part of the Site gently falls from south to north from around 22m AOD, falling to approximately 13m AOD adjacent to the A127. To the west of the A130, the Site rises from around 14m AOD to the north, up to 28m AOD, then falls to approximately 23m AOD adjacent to the A130.

6.4 The main part of the Site is surrounded by artificial embankments associated with the road infrastructure, especially in proximity to bridge crossings to the north-west and north-east. Further afield, land is generally of a similar level to the north, west and south, however, rises towards Rayleigh and South Benfleet to the east and south-east respectively.

6.5 The landform is not unusual in the locality, being typical of the local area and influenced by surrounding man-made levels, therefore is deemed to have a low value. The landform would be subject to some minor changes in level to accommodate foundations, access tracks, hard surfaced areas, fencing and attenuation associated with the proposed development, therefore, is deemed to have a medium to low susceptibility to change. Overall, the sensitivity of landform and topography is judged to be medium to low.

6.6 There would be limited changes to the landform of the Site to accommodate foundations, access tracks, fencing and attenuation features. The magnitude of change is considered to be no greater than low, which would result in Minor adverse levels of effects during all periods.

Figure 4: Aerial Photograph of site and surroundings

Water Features and Drainage

6.7 An agricultural drainage ditch follows the central hedgerow within the site, with no other water features within the Site. A number of attenuation ponds lie close to the Site boundary in proximity to the A130 to the south-west. Water features within the wider landscape are limited to agricultural ditches and occasional reservoirs or fishing ponds.

6.8 The water features within the Site are limited in nature and typical of the local area, therefore, deemed to have a low value. The access tracks will cross the ditch and therefore is deemed to have a medium susceptibility to change. Overall, the sensitivity of water features and drainage is judged to be medium to low.

6.9 The landform is not unusual in the locality, being typical of the local area and influenced by surrounding man-made levels, therefore is deemed to have a low value. The landform would be subject to some very minor changes in level to accommodate foundations, access tracks, hard surfaced areas, fencing and attenuation associated with the proposed development, therefore, is deemed to have a medium to low susceptibility to change. Overall, the sensitivity of landform and topography is judged to be medium to low.

6.10 The proposed development would require some short sections of the existing agricultural ditch to be culverted to accommodate access tracks, however, the remaining length of the ditch would remain intact. The magnitude of change is considered to be no greater than low, which would result in Minor adverse levels of effects during all periods.

Land Use, Buildings and Infrastructure

6.11 The main part of the Site consists of three irregular shaped arable fields defined by mature tree lined hedgerows within central fields and woodland areas on embankments to the north-east and north-west. Some extraction within the north-western field has occurred, with metalled access tracks to the north and west. Overhead powerlines cross the western area of the main part of the Site, with pylons lying adjacent to the boundary, as well as north of the A127. A metalled access track is located within the Site to the west of the A130.

6.12 The Site is surrounded by dual carriageways with large scale slip roads, roundabouts and highway bridges. Industrial development is located to the north beyond the A127, agricultural buildings and industrial development to the west and scattered industrial development amongst agricultural fields to the east and south-east. The combination of roads and industrial development provide visual and physical separation from surrounding areas. The site is not publicly accessible, with PROW FP 218 317 lying adjacent to the north-eastern boundary, however, the footpath is not accessible due to highway embankment and planting and not safely accessible across intervening roads.

6.13 The Site is heavily influenced by the network of adjacent roads and nearby industrial development, the overhead powerlines with associated pylons and nearby land uses such as a large scale electricity substation. The Site has no recreational value, conservation interest or scenic quality. Considering the above, a low value is attributed. The proposals are likely to affect most of the Site, albeit influenced by the surrounding context, therefore, is considered to have a medium susceptibility to change. Overall, the sensitivity is deemed to be medium to low.

6.14 The proposals would represent a temporary change to the current land use from part of an agricultural field to an operational BESS and substation, albeit in context of surrounding infrastructure. As such, the magnitude of change is assessed as medium to high upon the Site itself, resulting in a Moderate adverse level of effect during all periods.

Vegetation

6.15 The agricultural fields are separated by native hedgerows with occasional trees located within the centre of the main part of the Site. A mature overgrown hedgerow with trees lies to the north, separating the Site from the A127. Other surrounding vegetation includes maturing woodland on highway embankments to the north-east and north-west and a field boundary hedgerow adjacent to the roundabout between the A130 and A1245. The Site west of the A130 is surrounded by maturing native woodland and scrub to the north.

6.16 The vegetation within the surrounding landscape is similar to that surrounding the Site, with large A-roads being predominantly well vegetated either side and with agricultural boundaries established by trees and hedgerows. Dense areas of vegetation also surround the numerous industrial land uses and occasional scattered properties.

6.17 Although the field boundary trees and hedgerows provide structure within the site and some visual enclosure, most lies outside or adjacent, and is considered to have a medium to low value. The proposed development would have the potential to effect limited areas of vegetation within the Site to allow for access tracks,therefore, vegetation is considered to have a medium susceptibility to change. Overall, the sensitivity is deemed to be medium to low.

6.18 Vegetation within and surrounding the Site would be protected. There would be a limited loss of existing field boundary hedgerows to accommodate access tracks. As such, the magnitude of change is assessed as low upon the Site itself, resulting in a Minor adverse level of effect during all periods.

Landscape Character

6.19 This section provides an overview of the landscape character of the Site and its locality. It provides an indication of the sensitivity of the landscape character to the proposed development and the resulting effects which would arise from the development proposals.

National Level Landscape Character

6.20 The Site is located within National Character Area (NCA) 111, Northern Thames Basin, with the Site location identified in Figure 5. The key characteristics of NCA 111, of relevance to the Site, are set out below:

- *'The landform is varied with a wide plateau divided by river valleys. The prominent hills and ridges of the 'Bagshot Hills' are notable to the northwest and extensive tracts of flat land are found in the south.*
- *Characteristic of the area is a layer of thick clay producing heavy, acidic soils, resulting in retention of considerable areas of ancient woodland.*
- *A diverse landscape with a series of broad valleys containing the major rivers Ver, Colne and Lea, and slightly steeper valleys of the rivers Stour, Colne and Roman. Numerous springs rise at the base of the Bagshot Beds and several reservoirs are dotted throughout the area.*
- *The pattern of woodlands is varied across the area and includes considerable ancient semi-natural woodland. Hertfordshire is heavily wooded in some areas as are parts of Essex, while other areas within Essex are more open in character. Significant areas of wood pasture and pollarded veteran trees are also present*
- *The field pattern is very varied across the basin reflecting historical activity. Informal patterns of 18th-century or earlier enclosure reflect medieval colonisation of the heaths. Regular planned enclosures dating from the Romano-British period are a subtle but nationally important feature on the flat land to the south-east of the area. In the Essex heathlands 18th- and 19th-century enclosure of heathlands and commons followed by extensive 20th-century field enlargement is dominant.*
- *Mixed farming, with arable land predominating in the Hertfordshire plateaux, parts of the London Clay lowlands and Essex heathlands. Grasslands are characteristic of the river valleys throughout. Horticulture and market gardening are found on the light, sandy soils of former heaths in Essex, particularly around Colchester, along with orchards, meadow pasture and leys following numerous narrow rivers and streams.*

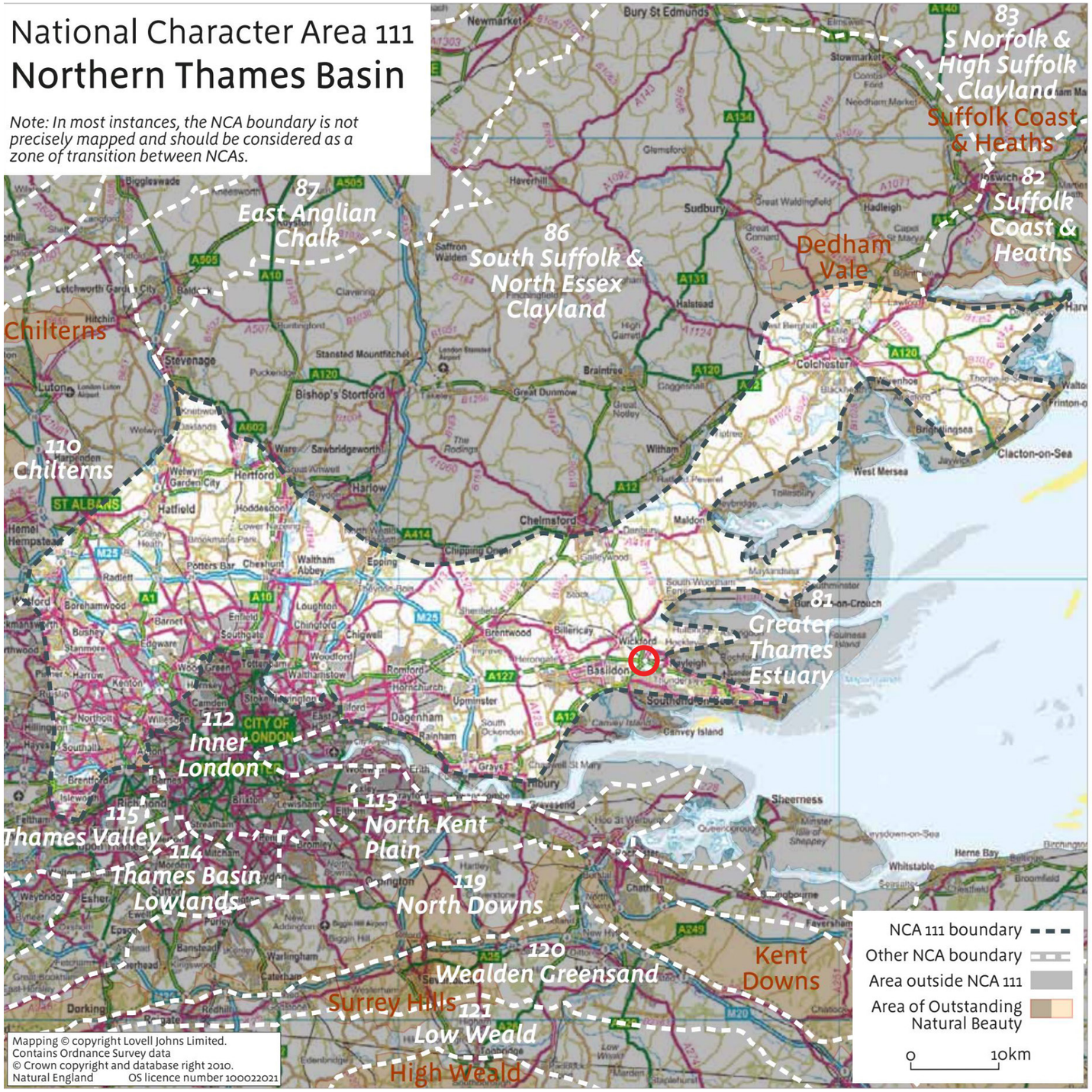


Figure 5: Extract of Natural England NCA 111 with approximate site location circled.

- *The diverse range of semi-natural habitats include ancient woodland, lowland heath and floodplain grazing marsh and provide important habitats for a wide range of species including great crested newt, water vole, dormouse and otter.*

- *Rich archaeology including Sites related to Roman occupation, with the Roman capital at Colchester and City of St Albans (Verulamium) and links to London. Landscape parklands surrounding 16th- and 17th-century rural estates and country houses built for London merchants are a particular feature in Hertfordshire.*

- *The medieval pattern of small villages and dispersed farming settlement remains central to the character of parts of Hertfordshire and Essex. Market towns have expanded over time as have the London suburbs and commuter settlements, with the creation of new settlements such as the pioneering garden city at Welwyn and the planned town at Basildon.*

- *Brick-built dwellings are characteristic from the late 17th century onwards. Prior to this dwellings and farm buildings tended to be timber built with weatherboarding, now mainly painted white but traditionally black or tarred, and whitewashed plaster walls.*

6.21 The national level assessment gives a broad brush impression of a region and provides a useful contextual overview of the character of the wider landscape. However, the proposed development is not considered to have the potential to result in any perceptible effects on landscape character at this national scale and to remain proportionate to the small scale of the Site in relation to the NCA, focus is placed upon the local landscape character.

County Landscape Character

6.22 The Essex Landscape Character Assessment was produced in 2003 by Chris Blandford Associates. The Site is located within the Urban Landscapes (G) Landscape Character Type and specifically within G3 - South Essex Coastal Towns Landscape Character Area (LCA) as illustrated on Figure 6. The key characteristics of G3 - South Essex Coastal Towns LCA are:

- *'Large areas of dense urban development.*
- *Strongly rolling hills with steep south and west facing escarpments covered by open grassland or a mix of small woods, pastures and commons.*
- *Extensive flat coastal grazing marshes in the south adjacent to the Thames Estuary.*
- *Large blocks of woodland in the centre of the area.*

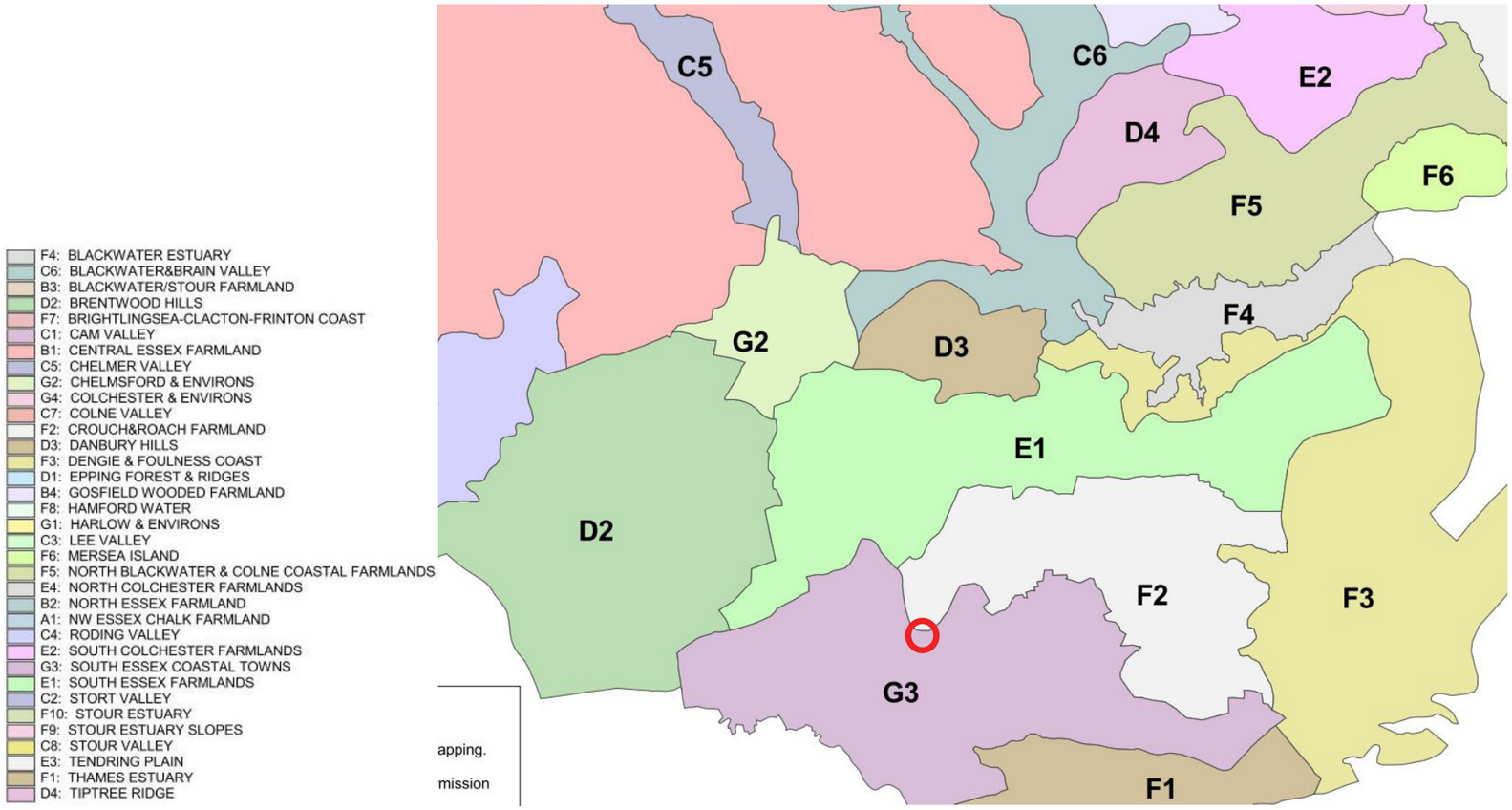


Figure 6: Extract from Landscape Character Areas map in Essex Landscape Character Assessment (approximate site location circled)

- *Narrow bands and broader areas of gently undulating arable farmland, with a remnant hedgerow pattern, separating some of the towns.*
- *Particularly complex network of major transportation routes.*
- *Pylon routes visually dominate farmland in the A130 corridor.'*

6.23 Although more detailed than the NCA, the areas defined within the County assessment are of such a scale that the proposed development is not considered to have the potential to result in any noteworthy effects to landscape character at this scale, therefore, focus is placed upon the published local landscape character.

Local Landscape Character

Volume One – Landscape Character Assessment of Basildon Borough – December 2014

6.24 Volume One of the Landscape Character Assessment was produced for Basildon Council by The Landscape Partnership (December 2014). The report identifies the Site as being located within Landscape Character Type (LCT): Lowland Farmlands which is illustrated by Figure 7 and is described as:

'Lowland Farmlands - Low lying landscape crossed in parts by major river corridors. Intensely farmed agricultural land that is in close proximity to well developed, densely populated settlements. Intrusive modern buildings may be a feature and the open character of the land allows views to settlements on higher ground.'

6.25 The Landscape Character Types are further broken down into Landscape Character Areas (LCA). The Site lies within 3. Bowers Gifford and North Benfleet Farmlands LCA as shown on Figure 8, with its key characteristics as follows:

- *Pylon lines are dominant features*
- *Few buildings or local roads, but crossed and bounded by several busy A roads (A13, A129, A130 and A127), which include wide dual carriageways, many of which feature as embankments, flyovers or cuttings for part of their route*
- *Main land-uses: arable farmland*
- *Rectilinear field system Dispersed settlement pattern*
- *Panoramic views south over Bowers Marshes (e.g. from Bowers Gifford Crematorium) Open landscape with little built development*
- *Rushbottom Lane Green Lanewith its connection under the A130 to Thundersely to the east*
- *All Saints Church, North Benfleet and St Margarets Church, Bowers Gifford*

6.26 3. Bowers Gifford and North Benfleet Farmlands LCA is considered to have a moderate condition and moderate strength of character, which results in its long term management strategy being to 'Improve and Conserve'.

6.27 Volume One of the Landscape Character Assessment identifies a number of key viewpoints within the borough which:

'should ideally be retained and enhanced as they provide an important way of appreciating the landscape character of the Borough.'

6.28 The nearest viewpoint is no. 18 from the A130, which is close to the south-western part of the Site, however, the viewpoint looks away from the main part of the Site.

Rochford District Council & Southend Borough Council – Landscape Character, Sensitivity & Capacity Study – July 2019

6.29 To the north-east of the Site, the Landscape Character, Sensitivity & Capacity Study within Rochford District Council administrative boundary defines the landscape as being within D: Wooded Farmland and Hills LCT and specifically within D1 - Rawreth LCA, as illustrated by Figure 9. Key characteristics of D: Wooded Farmland and Hills LCT are:

- *Elevated, undulating hills and slopes forming the central and western part of the District;*

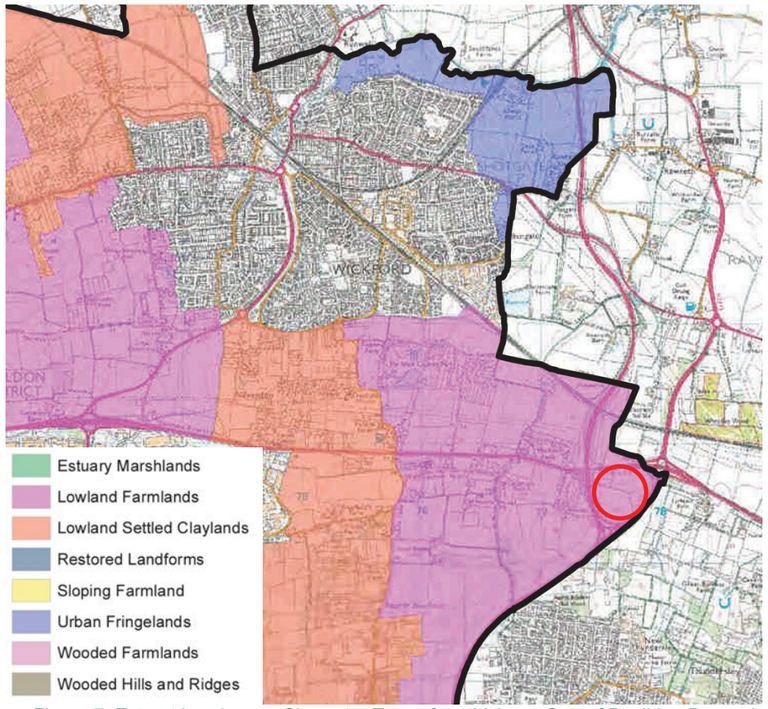


Figure 7: Extract Landscape Character Types from Volume One of Basildon Borough Landscape Character Assessment (approximate site location as red circle)

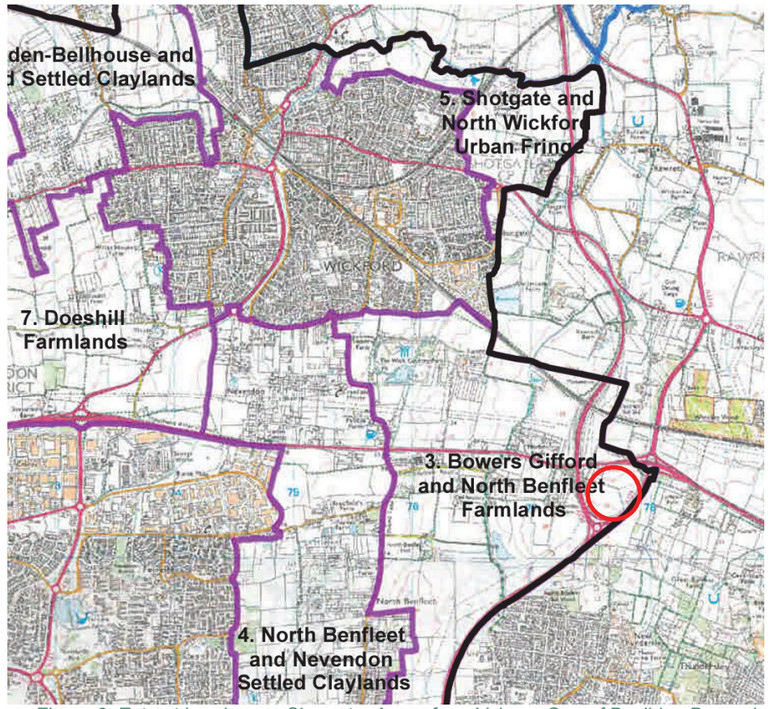


Figure 8: Extract Landscape Character Areas from Volume One of Basildon Borough Landscape Character Assessment (approximate site location as red circle)

- *Blocks of mature mixed and deciduous woodland) including areas of ancient and semi-natural woodland, combine with copses, treed hedgerows, tree-lined roads and individual trees to create a wooded landscape;*
- *Hedgerows are well maintained and often form robust, roadside boundaries that create an enclosed, sunken character when travelling the more minor routes;*
- *Tree-lined roads are common, through lower density settled areas to the edge of the towns;*
- *A variety of property types are associated with this landscape type, with historic halls and farmsteads scattered through the rural area and 20th century properties often lining the roads;*
- *Small to medium scale field network, comprising both arable and pasture;*
- *Strong presence of horse grazing and livery land uses, particularly associated with the edges of settlement and clusters of properties along roads;*
- *Views are of wooded horizons that obscure views of built form associated with the adjacent settlement edges;*
- *Numerous public routes particularly across the central, wooded area and linking between Hockley Woods and Cherry Orchard Jubilee Country Park.*

6.30 The report considers D1 - Rawreth LCA to have a low landscape value and a low to medium sensitivity, with a medium to high capacity to accommodate new development.

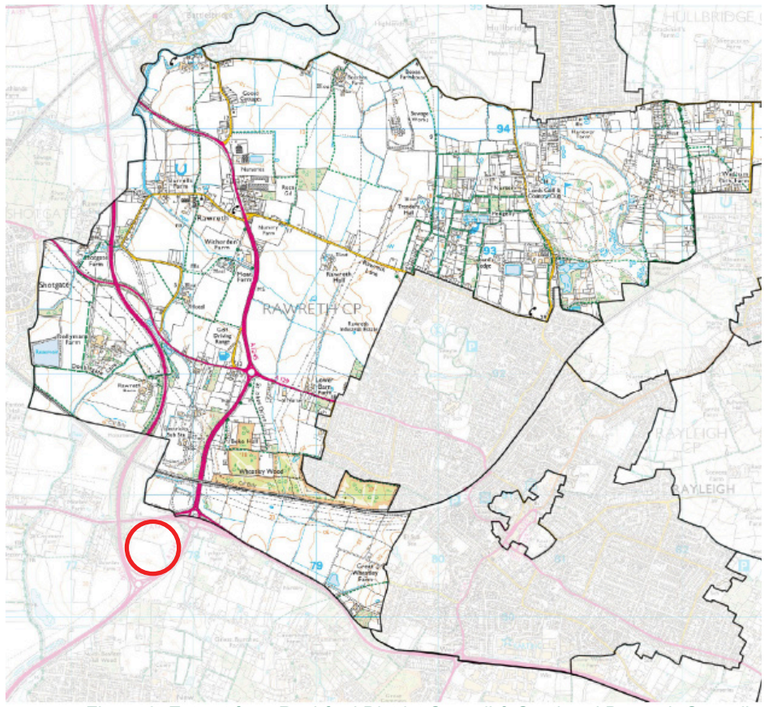


Figure 9: Extract from Rochford District Council & Southend Borough Council - Landscape Character, Sensitivity & Capacity Study - D1 - Rawreth LCA (approximate site location as red circle)

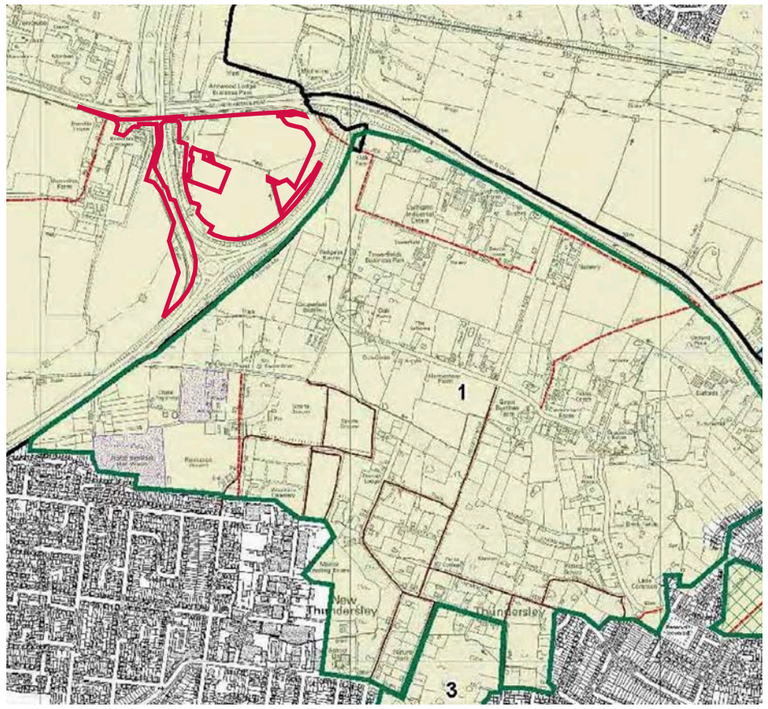


Figure 10: Extract from Green Belt Landscape Assessment for Castle Point Borough Council - Area 1 (site location as red line)

Green Belt Landscape Assessment For Castle Point Borough Council – September 2010

6.31 Castle Point Borough Council lies to the south-east of the Site, however, they do not have their own local landscape character assessment, instead referencing the Essex Landscape Character Assessment. However, the council have produced a Green Belt Landscape Assessment, which provides an assessment of sensitivity of landscape areas within the Green Belt. The landscape area covering the land to the south-east of the Site is Area 1 and is illustrated by Figure 10, with a description set out below:

- *The area comprises a mosaic of woodland, pasture and grassed areas for formal and informal recreation. Hedgerows and ditches are also prominent features. The landform is rolling with land falling from the south towards the north of the site, and from west towards the east. Species are mainly native, with hawthorn and blackthorn hedges, and oak and ash common in woodland and as boundary trees.*
- *The landscape is enclosed through a pattern of agricultural fields, pasture and small plots. Plotland dwellings, smallholdings, recreational buildings and stables are largely hidden by the vegetation. Throughout the area, lanes and tracks are largely narrow and unsurfaced, restricting vehicular access, but providing access to the countryside for walkers and cyclists.*
- *The landscape has retained its pattern of enclosure, although there are areas where dumping of soils, mounding and poor maintenance are eyesores in this attractive rural landscape.*
- *This is a relatively intimate/small scale landscape with a variety of views and enclosed spaces. Plotland boundaries and the enclosure pattern are particularly distinctive.*

6.32 Area 1 is identified as having a high landscape sensitivity and a medium visual sensitivity.

Effects upon 3. Bowers Gifford and North Benfleet Farmlands LCA

6.33 The Site is similar in some aspects to the LCA, with its arable land use and influence of dominant pylons and wide dual carriageways with embankments. The LCA is considered to have a moderate condition and moderate strength of character as set out in the published character assessment, therefore, a medium sensitivity has been assumed.

6.34 The proposed development would introduce a man-made feature into agricultural fields, albeit within an area that is already extensively influenced by road and energy infrastructure, as well as by nearby industrial land uses in proximity to the Site. It is therefore predicted that the proposed development would give rise to a low magnitude of change upon the wider character area during construction and at Year 1, which would result in a Minor adverse level of effect.

Effects upon D1 - Rawreth LCA

6.35 The value of the LCA is considered to be low with a sensitivity of medium to low, as set out in the published character assessment.

6.36 The Rawreth LCA does not directly cover the Site, therefore, no direct effects upon the LCA would occur as a result of the proposed development. Although close to the LCA, it is visually separated from the LCA by the A127 and its associated vegetation, which is further enforced by the road bridges. It is therefore considered that the perceptual or aesthetic characteristics of the landscape character area and its immediate setting would not be adversely affected by the proposed development. A worst case very low magnitude of change is predicted during construction and at Year 1, resulting in a no greater than Minor indirect level of effect.

Effects upon Area 1

6.37 The landscape sensitivity of Area 1 is deemed to be high and the visual sensitivity as medium, as set out in the Green Belt Landscape Assessment. Therefore, a worst case high sensitivity is assumed for the purposes of this assessment.

6.38 Area 1 does not directly cover the Site, therefore, no direct effects would occur as a result of the proposed development. Although close to Area 1, the A1245 dual carriageway physically separates the area from the proposed development. In addition, Area 1 is visually separated from the proposed development through earth embankments along with woodland planting either side of the A-road. It is therefore considered that the perceptual or aesthetic characteristics of the landscape character area and its immediate setting would not be adversely affected by the proposed development. A very low magnitude of change is predicted during construction and at Year 1, resulting in a no greater than Minor indirect level of effect.

Effects on Local Landscape Character

Sensitivity of the Site and immediate surroundings

6.39 As stated previously, the Site is similar in some aspects to the Bowers Gifford and North Benfleet Farmlands LCA. The Site is not covered by any designation that recognises a specific landscape or scenic importance and there are no Listed Buildings or identified historical or ecological interests with which it is directly associated. Whilst it contains some adjacent elements of value, in the form of the existing trees and hedgerows, it is not publicly accessible and is of a nature which is not rare in the local landscape. It is therefore, not considered to be a 'valued landscape' as discussed in the NPPF. However, the Site would be susceptible to the type of development proposed but also influenced by the adjacent road and energy infrastructure and nearby industrial built form. The susceptibility to change of the Site and immediate surrounding is judged to be medium to low, with a value of low. Therefore, the sensitivity of the Site and immediate surroundings is assessed as medium to low.

Effects on the Site and immediate surroundings

6.40 The landscape character of the Site and surroundings has the potential to be influenced to some degree by the proposed development for a temporary period. The proposed development would introduce a new man-made feature into the landscape, which would incorporate most of the three agricultural fields and therefore adversely alter the physical and perceptual attributes of the Site. It is acknowledged however, that limited landscape features would be lost. The influence upon the surroundings would be limited by vegetation aligning the surrounding A-roads and by the nearby road bridges, as well as by industrial development to the north-east and west. The magnitude of change to the Site and surrounding area is assessed as medium to high, which when combined with its medium to low sensitivity would result in a Moderate level of effect upon the landscape character of the Site during construction and at Year 1.

Receptor	Value	Susceptibility	Sensitivity	Development Phase	Magnitude of change	Level of Effect
Landscape Features						
Landform and topography	Low	Medium to Low	Medium to Low	Construction	Low	Minor adverse
				Year 1	Low	Minor adverse
Water features and drainage	Low	Medium to Low	Medium to Low	Construction	Low	Minor adverse
				Year 1	Low	Minor adverse
Land use, buildings and infrastructure	Low	Medium	Medium to Low	Construction	Medium to High	Moderate adverse
				Year 1	Medium to High	Moderate adverse
Vegetation	Low	Medium	Medium to Low	Construction	Low	Minor adverse
				Year 1	Low	Minor adverse
Landscape Character						
3. Bowers Gifford and North Benfleet Farmlands LCA	--	--	Medium	Construction	Low	Minor adverse
				Year 1	Low	Minor adverse
D1 - Rawreth LCA	Low	--	Medium to Low	Construction	Very Low	Minor adverse
				Year 1	Very Low	Minor adverse
Area 1	--	--	High	Construction	Very Low	Minor adverse
				Year 1	Very Low	Minor adverse
The site itself	Low	Medium to Low	Medium to Low	Construction	Medium to High	Moderate adverse
				Year 1	Medium to High	Moderate adverse

Table 1: Summary of Landscape Effects

7. VISUAL EFFECTS

Introduction

7.1 An assessment of visual effects considers the potential for changes in views and visual amenity. The aim is to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected, and the nature of the views and visual amenity (meaning the overall quality and pleasantness to a view).

7.2 Effects are considered during construction and at Year 1. A summary of visual effects are included in Table 2.

7.3 A photographic record is included in Appendix 2 with the viewpoint locations shown on Figure 11. Due to health and safety related issues, parts of the road network were driven but photography was not taken. In these cases, representative Google Earth Street View Images have been used, which is indicated on the relevant photography.

Zone of Theoretical Visibility

7.4 The Screened Zone of Theoretical Visibility (Figure 11) identifies the potential locations from which the development may be visible. The Screened Zone of Theoretical Visibility (SZTV) has been produced using Digital Terrain Modelling (DTM) and LIDAR data. Existing built development (8m tall) and larger blocks of woodland have also been modelled (15m tall) to take account of the screening effect that these would provide.

7.5 However, the screening effect provided by smaller blocks of woodland and hedgerows/hedgerow trees, particularly those within the Site, have not been taken into account, and consequently the actual extent of the area from which the proposed development is visible is in reality, much smaller. This is particularly evident where theoretical visibility extends beyond the A127 to the north, however, in reality the vegetation either side of the dual carriageway is likely to prevent direct views towards the Site north of the road, as demonstrated by Viewpoint 5. Similarly to the south-west of the Site beyond the A130, the series of established hedgerows would likely reduce or obscure the actual visibility towards the proposed development from those areas shown with theoretical visibility on Figure 11. In addition, the SZTV does not consider any proposed landscape mitigation.

7.6 The SZTV has been run at a maximum height of 4.5m for built elements which form the proposed development, as shown on the Infrastructure Layout.

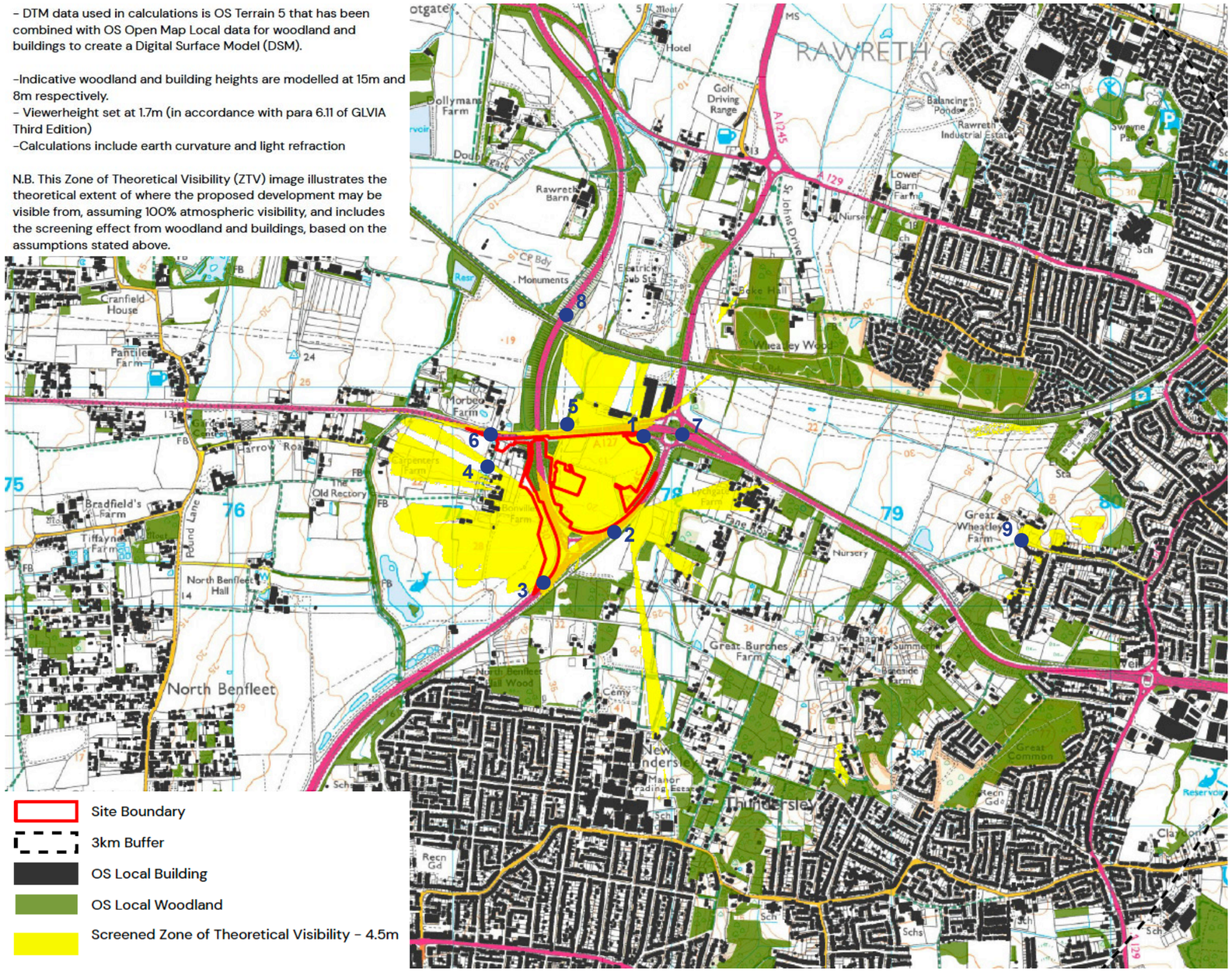


Figure 11: Screened Zone of Theoretical Visibility and Viewpoints

Sensitivity

7.7 Residential receptors and users of public rights of way are considered to have a high visual sensitivity to the change proposed, as in all cases they are considered to have a high susceptibility to changes in their views and that these views are deemed to be of a high value. People using nearby A-roads are considered to have a low sensitivity reflecting the low susceptibility and value associated with the views from these routes.

7.8 The approach to sensitivity of visual receptors is set out in Appendix 1.

Residential Receptors

7.9 For the purpose of this assessment, it is assumed as a worst-case, that all nearby dwellings are permanent residences.

Scattered farms and properties to the west

7.10 Views are indicatively represented by photographs taken from Photograph Location 4 within Appendix 2.

7.11 These residents include those properties located off Bonvilles Cottages, as well as those properties at the eastern end of Harrow Road. Those properties located off Bonvilles Cottages are mostly set within areas of industrial development, which limit views towards the proposed development. Those residents within properties to the east of Harrow Road would see the proposed development over the properties and industrial development either side of Bonvilles Cottages. All properties would have views filtered by intervening embankments and vegetation either side of the A130, as well as by intervening field boundary trees and hedgerows. Any glimpsed views by residents would be seen in context of traffic along the A130 dual carriageway and overhead powerlines with associated pylons crossing the landscape.

7.12 A worst case low magnitude of change is predicted, resulting in a Minor level of effect during all time periods.

Scattered farms and properties to the east and south-east

7.13 These residents include those properties located off Fane Road and Burches Road, as well as those properties access directly from the A127. Most properties are set within or close to industrial development, or surrounding by mature vegetation, limiting outward views towards the proposed development. All properties would have views filtered by intervening embankments and vegetation either side of the A1245, as well as by intervening field boundary trees and hedgerows. Any very limited glimpsed views by residents would be seen in context of traffic along the A1245 dual carriageway.

7.14 A very low magnitude of change is predicted, resulting in a Minor level of effect during all time periods.

Properties on the south-western edge of Rayleigh

7.15 Views are indicatively represented by photographs taken from Photograph Location 9 within Appendix 2.

7.16 Residents within these properties occupy elevated land, approximately 1.8km to the south-east of the Site, with residents having the benefit of a panoramic view over the surrounding landscape. The proposed development would be seen in context of the surrounding roads and numerous electricity pylons on the skyline, as well as nearby industrial development. A worst case low magnitude of change is predicted, resulting in a Minor level of effect during all time periods.

Recreational Receptors

7.17 As previously stated, the PROW FP 218 317, located directly adjacent to the Site, does not appear to be accessible, mainly as a result of its severance by roads embankments and associated vegetation. Therefore this PROW has not been considered as a receptor in this assessment..

PROW FP 149 319

7.18 Views are indicatively represented by photographs taken from Photograph Location 4 within Appendix 2.

7.19 The PROW follows the route of Bonvilles Cottages, before heading further to the west across agricultural fields. The visual affects would be similar to those identified for ‘Scattered farms and properties to the west’. Therefore, a worst case low magnitude of change is predicted, resulting in a Minor level of effect during all time periods.

PROW FP 74 BENF

7.20 The PROW follows the route of Fane Road, before linking with the A1245 close to the junction with the A127. The visual affects would be similar to those identified for ‘Scattered farms and properties to the east and south-east’. Therefore, a very low magnitude of change is predicted, resulting in a Minor level of effect during all time periods.

PROW FP 24 289

7.21 Views are indicatively represented by photographs taken from Photograph Location 9 within Appendix 2.

7.22 The PROW offers a connection from the south-western edge of Rayleigh to the A127 and PROW to the south of the dual-carriageway. From elevated locations along the footpath, walkers have the benefit of a panoramic view over the surrounding landscape. The proposed development would be seen in context of the surrounding roads and numerous electricity pylons on the skyline, as well as nearby industrial development. As the footpath falls towards the A127, there would be no view towards the proposed development. A worst case low magnitude of change is predicted from elevated parts of the footpath only, resulting in a Minor level of effect during all time periods.

Road Users

A127

7.23 Views are indicatively represented by photographs taken from Photograph Locations 1, 5, 6 and 7 within Appendix 2.

7.24 The A127 is a dual carriageway providing a connection between Southend-on-Sea to the south-east and the edge of Romford to the north-west. The road passes close to the northern boundary of the Site.

7.25 When to the north of the Site, direct views towards the proposed development are filtered by vegetation aligning the road, limits views to fleeting and incidental glimpses (refer to Viewpoints 1 and 5). To the north-west, views towards the proposed development would be obscured by the intervening A130 road bridge (refer to Viewpoint 6). Although most direct views towards the proposed development would be obscured by intervening vegetation aligning the road, along a short elevated section of road bridge, oblique glimpses towards the proposed development would be possible for a fleeting and momentary period, seen in context of industrial development of the opposing side of the road (refer to Viewpoint 7).

7.26 A medium magnitude of change is predicted during construction and at Year 1, resulting in a Moderate to Minor level of effect. This level of effect would be limited to those parts of the road directly to the north and those elevated sections to the north-east.

A130

7.27 Views are indicatively represented by photographs taken from Photograph Locations 3 and 8 within Appendix 2.

7.28 The A130 is a national speed limit dual carriageway providing a connection between Canvey Island to the south and Chelmsford further to the north. The road runs parallel to the western and south-western boundary of the Site.

7.29 To the north-west of the Site, the road is located on an elevated well vegetated embankment, limiting any views by drivers towards the proposed development. Similarly, further to the north-west, only glimpsed and fleeting views are possible towards the proposed development, seen in context of pylons and Rayleigh Substation in the foreground (refer to Viewpoint 8). However, to the south-west, views by drivers are more open in nature, with clear views towards the proposed development, including during construction (refer to Viewpoint 3). Beyond approximately 0.3km to the south-west along the road, views by towards the proposed development would be obscured by intervening landform and vegetation.

7.30 A high magnitude of change is predicted during construction and at Year 1, resulting in a Moderate level of effect. This level of effect would be limited to those parts of the road to the south-east within approximately 0.3km.

A1245

7.31 Views are indicatively represented by photographs taken from Photograph Location 2 within Appendix 2.

7.32 The road provides a local connection between the A130 adjacent to the Site, up to the A132/A130 junction near Battlesbridge further to the north.

7.33 There would be limited or no views towards the proposed development for drivers along the road to the north-east of the Site, mainly as a result of intervening road embankments and industrial development. However, open views towards the proposed development would be possible, where the road lies adjacent to the Site to the south-east. The proposed development would be clearly noticeable during construction and at Year 1 when viewed from the road to the south-east, seen in context of other nearby industrial development and overhead powerlines with associated pylons.

7.34 A high magnitude of change is predicted during construction and at Year 1, resulting in a Moderate level of effect. This level of effect would be limited to those parts of the road directly to the south-east.

Receptor	Sensitivity	Development Phase	Magnitude of change	Level of Effect
Residential receptors				
Scattered farms and properties to the west	High	Construction	Low	Minor adverse
		Year 1	Low	Minor adverse
Scattered farms and properties to the east and south-east	High	Construction	Very Low	Minor adverse
		Year 1	Very Low	Minor adverse
Properties on the south-western edge of Rayleigh	High	Construction	Low	Minor adverse
		Year 1	Low	Minor adverse
Recreational receptors				
PROW FP 149 319	High	Construction	Low	Minor adverse
		Year 1	Low	Minor adverse
PROW FP 74 BENF	High	Construction	Very Low	Minor adverse
		Year 1	Very Low	Minor adverse
PROW FP 24 289 (elevated parts only)	High	Construction	Low	Minor adverse
		Year 1	Low	Minor adverse
Road users				
A127	Low	Construction	Medium	Moderate to Minor adverse
		Year 1	Medium	Moderate to Minor adverse
A130	Low	Construction	High	Moderate adverse
		Year 1	High	Moderate adverse
A1245	Low	Construction	High	Moderate adverse
		Year 1	High	Moderate adverse

Table 2: Summary of Visual Effects

8. GREEN BELT

8.1 This section provides landscape and visual information to inform the consideration of the proposals in relation to the Green Belt. In particular it provides a consideration of the potential for the proposals to impact on the openness of the Green Belt, as well as addressing the proposals in relation to the five purposes of the Green Belt, where these relate to landscape and visual matters. The section also briefly considers the matter of grey belt.

8.2 The site lies centrally within a Green Belt area between the settlements of Wickford, Rayleigh, Basildon and South Benfleet.

Policy Context

8.3 The NPPF considers Green Belt Matters in Section 13. This confirms at paragraph 142 that:

'The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence'

8.4 There is no definition given to 'openness' in the NPPF. However, further clarification is provided in the 'Green Belt' Guidance, provided online by the UK Government. This sets out at paragraph 001 (Reference ID: 64-001-20190722) that:

'Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgement based on the circumstances of the case. By way of example, the courts have identified a number of matters which may need to be taken into account in making this assessment. These include, but are not limited to:

- *openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;*
- *the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and*
- *the degree of activity likely to be generated, such as traffic generation."*

8.5 Paragraph 143 of the NPPF goes on to note that the Green Belt 'serves five purposes', as follows:

a) to check the unrestricted sprawl of large built-up areas;

b) to prevent neighbouring towns merging into one another;

c) to assist in safeguarding the countryside from encroachment;

d) to preserve the setting and special character of historic towns; and

e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

8.6 Paragraph 153 addresses development proposals affecting the Green Belt and states that:

'When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt, including harm on its openness. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.'

8.7 In relation to grey belt, paragraph 155 of the NPPF states:

'The development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all the following apply:

a. The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan...'

8.8 Paragraph 160 addresses renewable energy projects located in the Green Belt and states that:

'When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.'

8.9 The matter of the overall consideration of whether the site comprises grey belt and whether 'very special circumstances' exist or not is addressed separately elsewhere in the Planning Statement. This Section however provides information regarding the contribution the site makes to Green Belt purposes and any landscape and visual harm to the Green Belt so that this can be used to inform that wider planning exercise and assist with the consideration of whether the site comprises grey belt.

Potential for Impact on Openness - Spatial Component

8.10 In order to consider the 'spatial' component of openness it is necessary to firstly understand the extent of the existing uses and built form at the site. In this case the Site currently comprises agricultural fields with built form elements consisting of metalled access tracks and an area of extraction. On that basis it is therefore acknowledged that with regard to the 'spatial' component of openness there would be an increase in the extent of development within the Green Belt. However, it is worth noting the context of the Site and the surrounding road and energy infrastructure.

8.11 It is important to recognise that the potential for impact to openness should be based on a consideration of both the 'spatial' component and the 'visual' component, which are addressed below.

Potential for Impact on Openness - Visual Component

8.12 In order to consider the visual component of openness, regard has been had to the findings of the LVIA which considered to what extent the proposed development would be visible from the Green Belt.

8.13 The proposed layout has sought to retain most of the existing field boundary vegetation, thereby minimising harmful visual effects. Due to the nature of the wider landscape which includes a network of surrounding mature vegetation, particularly along A-roads and road bridges with associated vegetated embankments as well as industrial development to the north and scattered to the east and west, the visibility of the proposed development would generally be very limited in nature. This limited visibility is demonstrated by the theoretical visibility shown on SZTV at Figure 11, which in reality is even further limited than as shown.

8.14 The site is already well screened and enclosed by existing mature vegetation along adjacent roads. Most potential visual receptors across the Green Belt in the nearby area will experience limited or no views; where views of the site are possible, most of the identified views experienced will be effectively screened and/or filtered by existing vegetation. Some adverse effects are likely to remain from adjacent dual-carriageways to the south-west and south-east of the site, but these visual effects will largely be softened by the existing vegetation pattern. Overall, anticipated visual effects within the site's surrounding area are generally very localised and limited in nature.

Potential for Impact on the Purposes of the Green Belt

8.15 The first three purposes (a – c) are considered relevant to consider from a landscape and visual perspective and are considered below:

a) to check the unrestricted sprawl of large built-up areas

8.16 The proposals have sought to integrate into the existing framework of field boundaries and sensitively offset the proposals to retain these landscape features within the site. It is also understood that the site itself does not make a strong contribution with regard to purpose a.

b) to prevent neighbouring towns merging into one another

8.17 It is not considered that the proposed development would make any material contribution to the merging of any of the nearby settlements either physically or perceptually. It is also understood that the site itself does not make a strong contribution with regard to purpose B.

c) to assist in safeguarding the countryside from encroachment

8.18 It is acknowledged that the proposed development would encroach into the countryside as far as the actual footprint of the new built form is confirmed. However, any impact on the wider countryside would be limited by the context of the existing road infrastructure on all sides of the proposed development.

Summary and Conclusion

8.19 It is considered with regard to the sensitive design of proposed development and the retention of most existing landscape features, that the actual perceivable extent of any harm to the Green Belt is relatively limited. This harm should therefore be weighed accordingly alongside the benefits of the proposals, as set out in the wider analysis of the ‘very special circumstances’ presented in the Planning Statement which accompanies the planning application and also addresses the matter of whether the site comprises grey belt.

9. CUMULATIVE EFFECTS

9.1 The appraisal of cumulative effects aim to identify any interactions with other similar development types (including electricity infrastructure developments and associated infrastructure) which could result in further notable landscape and visual effects not identified within the LVIA. GLVIA (para 7.1) states that cumulative effects: "…result from the incremental changes caused by other past, present or reasonably foreseeable actions together with the project."

9.2 GLVIA3 (para 7.14) goes onto states that: "Schemes at pre-planning or scoping stage are not generally considered in the assessment of cumulative effects because firm information on which to base the assessment is not available and because of the uncertainty of about what will occur that is not 'reasonably foreseeable''."

9.3 Therefore similar consented developments, and current valid planning applications are considered. However, pre-application, screening and scoping stage proposals are not considered within this cumulative assessment given the uncertainty that such schemes would come forward to the planning stage. It should be noted that operational developments similar to the proposed development are considered as part of the baseline assessment within the LVA.

9.4 The methodology used to assess cumulative effects is in accordance with the principles set out in Chapter 7 of The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and the Institute for Environmental Management and Assessment, 2013). It is important to note in particular that at GLVIA para 7.5, states that such an assessment is to be kept 'reasonable and in proportion to the nature of the project under consideration'.

9.5 There are a number of energy developments within the study area, with varying status. The approximate location of the sites are shown on Figure 13 and listed below, including a description of the proposals and their current planning status as of April 2025

Consented

- 24/00142/FULL - Installation of a battery energy storage system with associated infrastructure
- 22/00175/FUL (Appeal reference: APP/B1550/W/23/3329891) - Proposed Development of a Solar Farm, access, ancillary infrastructure and cable route.

In Planning

- 24/00455/FUL - Construct unmanned battery energy storage system (BESS) with a total import capacity of up to 480MW including installation of equipment within substation compound, acoustic and other boundary fencing, building to house customer control room, water tanks, laying of hard standing including to form internal access roads and siting of storage containers, some elevated. Alter existing vehicular access onto A1245 and form new (emergency) vehicular access onto A127.

Consideration of Cumulative Effects with Consented Schemes

9.6 Both consented schemes are located to the north of the A127, with the BESS lying on the adjacent side of the road to the north and the solar farm located approximately 0.4km to the west. Both sites are separated by established woodland and vegetation aligning both sides of the A127, with the addition of a road bridge and vegetation within intervening fields between the Site and the solar farm.

9.7 Although the Proposed Development in combination with the two consented sites would extend the presence of electrical infrastructure adjacent to the A127, this would be in context of the existing Rayleigh substation and overhead powerlines with associated pylons crossing the nearby landscape.

9.8 There would be some minor additional cumulative effects predicted upon 3. Bowers Gifford and North Benfleet Farmlands LCA and the local landscape character within the immediate locality as a result of the combined effect between the proposed development and the BESS. However, such a development would be likely to serve to consolidate existing impacts rather than bring about any new impacts that would have the potential to give rise to notable cumulative effects in combination with the proposed development.

9.9 In addition, there would also be some minor additional cumulative effects predicted upon D1 - Rawreth LCA as a result of the combined effect between the proposed development and the solar farm, noting that any effects as a result of the proposed development would be indirect. In this case, the solar farm would give rise to greater levels of effects upon D1 - Rawreth LCA to which the proposed development would not increase.

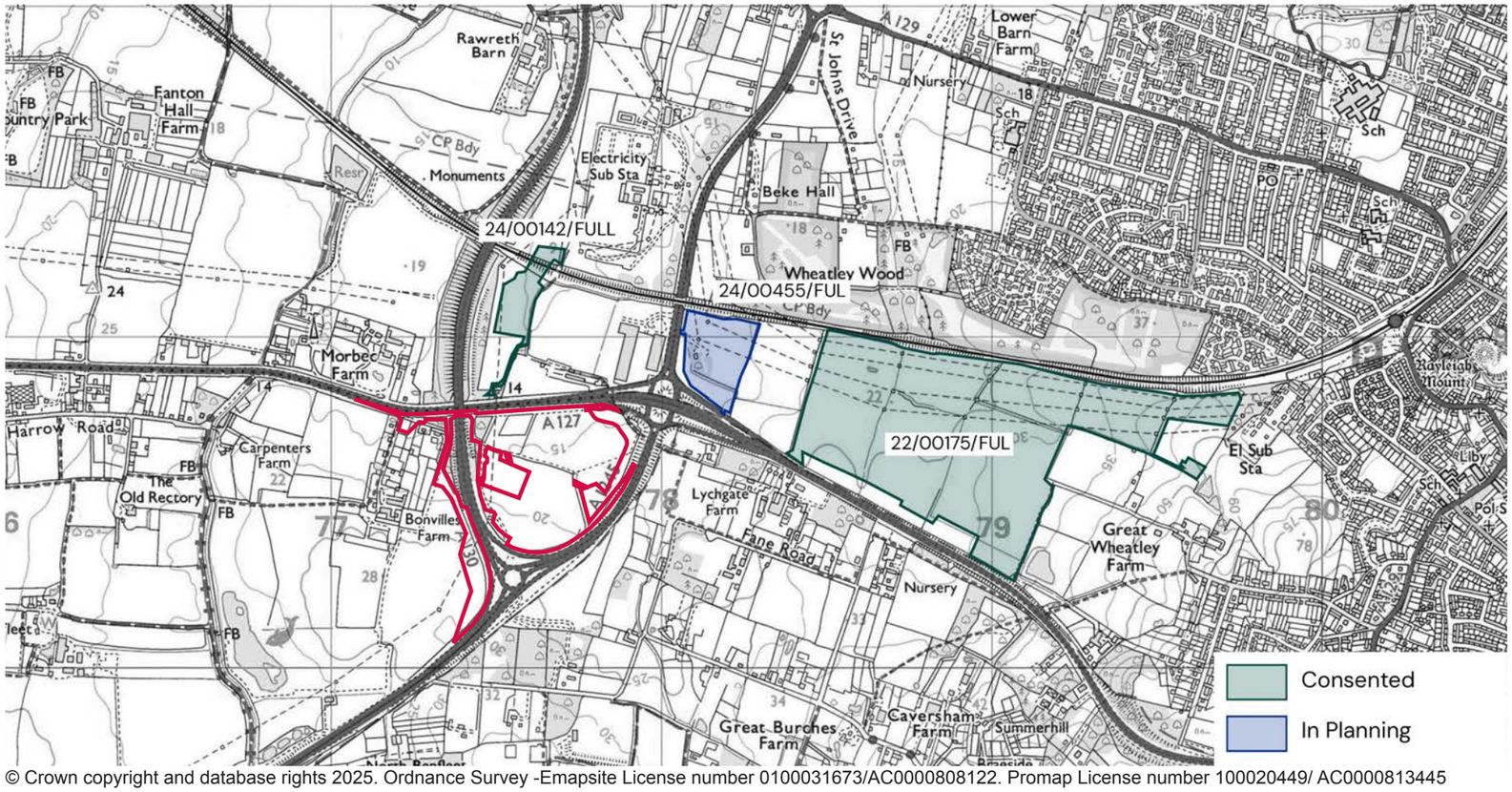


Figure 12: Cumulative Developments

9.10 The proposed development and the two consented schemes would be seen in sequence with one another along the A127, however, would unlikely to be seen together, with any intervisibility between views limited by the established vegetation on both sides of the road. Therefore, it is predicted that the effects identified within the LVA would not increase to any notable degree along the road from those effects already identified as a result of the two schemes.

9.11 Walkers along elevated parts of PROW FP 24 289 and residents within properties on the south-western edge of Rayleigh would likely see the proposed development simultaneously with the two consented schemes. Although the total effects of all schemes seen together are predicted to notably increase visual effects from these receptors, the greater effects would be as a result of the solar farm, with the BESS scheme and the proposed development seen behind intervening vegetation and in context of road infrastructure and nearby industrial development.

Consideration of Cumulative Effects with In Planning Schemes

9.12 The proposed development is located on the opposing side of the A127 to the in-planning BESS scheme, with the BESS scheme located approximately 0.2km to the north-east of the Site. There would be very limited intervisibility between the two schemes despite their proximity due to the dense vegetation aligning either side of the A127,, vegetation along the A1245 and by the road bridge with associated artificial vegetated embankments.

9.13 Minor additional cumulative visual effects are predicted to occur from the A127, when considering the sequence of development along the road, limited by the established vegetation on both sides of the route.

9.14 The proposed development with the two consented schemes and the addition of the in-planning BESS would be seen simultaneously from elevated parts of PROW FP 24 289 and from properties on the south-western edge of Rayleigh. Although the total effects of all schemes seen together are predicted to notably increase visual effects from these receptors, the greater effects would be as a result of the consented solar farm and in-planning BESS scheme, with the consented BESS scheme and proposed development seen behind intervening vegetation and in context of road infrastructure and nearby industrial development.

10. SUMMARY AND CONCLUSION

Landscape Character

10.1 The proposed development would introduce a new man-made feature into the landscape. It is acknowledged however, that limited landscape features would be lost. The influence upon the surroundings would be limited by surrounding vegetation. There would be a Moderate level of effect upon the landscape character of the Site itself.

10.2 Within 3. Bowers Gifford and North Benfleet Farmlands LCA, the proposals would form a man-made minor alteration to the physical and perceptual attributes of the character area, albeit one that is already influenced by road and energy infrastructure surrounding the Site. A Minor adverse level of effect would occur. Effects upon other landscape character areas would be no greater than Minor.

Landscape Features

10.3 The Site is heavily influenced by the network of adjacent roads, as well as nearby employment land, network of pylons and nearby land uses such as a large scale electricity substation. The proposals would represent a change to the current land use from part of agricultural land to an operational battery energy storage system, albeit in context of surrounding infrastructure. As such, a Moderate adverse level of effect would occur upon land use

10.4 In relation to vegetation, some loss would occur during construction. resulting in a Minor adverse level of effect, however, vegetation removal would be kept to minimum.

10.5 There would be limited adverse effects to local landform and topography and water features and drainage.

Visual Receptors

10.6 Due to the enclosed nature of the Site, with surrounding vegetation, road bridges and road embankments, the visibility of the proposed development is very limited in nature.

10.7 Some Moderate and Moderate to Minor adverse effects would occur to users of the adjacent A-roads, predominantly due to their proximity to the proposed development. However, effects upon nearby residential properties and users of public rights of way would be no greater than Minor.

Green Belt

10.8 It is considered with regard to the sensitive design of proposed development and the retention of most existing landscape features, that the actual perceivable extent of any harm to the Green Belt is relatively limited. This harm should therefore be weighed accordingly alongside the benefits of the proposals, as set out in the wider analysis of the 'very special circumstances' presented in the Planning Statement.

Cumulative

10.9 It is predicted that there would be some increased cumulative effects upon landscape character and visual receptors as a result of the proposed development and the consented and in-planning similar development types. However, it is predicted that cumulative effects identified already identified would not increase to any notable degree, with effects influenced by the existing nearby or adjacent road and energy infrastructure.

Conclusion

10.10 From a landscape and visual perspective, any notable effects on landscape character or visual receptors as a result of the proposed development would be confined mostly to adjacent receptors, with visual effects reduced by the context of surrounding infrastructure.

10.11 Overall, the total extent of the landscape and visual effects would be localised and limited in nature.

11. REFERENCES

11.1 The following documents have been consulted during the preparation of this statement:

- National Planning Policy Framework, December 2024;
- Basildon District Local Plan Saved Policies (September 2007);
- Basildon Borough Councils' Volume One of the Landscape Character Assessment (December 2014);
- Landscape Character, Sensitivity & Capacity Study, Rochford District Council and Southend Borough Council (July 2019);
- Green Belt Landscape Assessment For Castle Point Borough Council, Essex Landscape Design, September 2010;
- Natural England (2014) National Character Area (NCA) 111;
- Essex Landscape Character Assessment, Chris Blandford Associates, 2003;
- Guidelines for Landscape and Visual Impact Assessment (3rd edition) - Landscape Institute/ Institute of Environmental Management and Assessment, 2013;
- Landscape Institute GLVIA3 Statement of Clarification 1/13, June 2013; and
- Visual Representation of Development Proposals, Technical Guidance Note 06/19, September 2019.

APPENDIX 1: ASSESSMENT CRITERIA

INTRODUCTION

This appendix presents the assessment criteria adopted for the appraisal of landscape and visual effects arising from the proposed development.

The primary source of best practice for LVA in the UK is The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and the Institute for Environmental Management and Assessment, 2013). The assessment criteria adopted to inform the appraisal of effects has been developed in accordance with the principles established in this best practice document. It should however be acknowledged that GLVIA3 establishes guidelines not a specific methodology. The preface to GLVIA3 states:

“This edition concentrates on principles and processes. It does not provide a detailed or formulaic ‘recipe’ that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.”

The criteria set out below have therefore been specifically tailored for this appraisal to ensure that the methodology is appropriate and fit for purpose.

The purpose of an LVA when undertaken outside the context of an EIA is to identify and describe the relative level of any landscape and visual effects arising as a result of the proposals. As confirmed in GLVIA3 Statement of Clarification 1/13 (Landscape institute, 10th June 2013) an LVA for development which has been screened as not requiring EIA should avoid concluding whether the effects are significant or not and this is the approach adopted in this LVA.

An LVA must consider both:

- effects on the landscape as a resource in its own right (the landscape effects); and
- effects on specific views and visual amenity more generally (the visual effects).

Therefore, separate criteria are set out below for the assessment of landscape and visual effects.

NATURE (SENSITIVITY) OF LANDSCAPE FEATURES

The nature or sensitivity of an individual landscape feature or element reflects its susceptibility to change and its value. It is therefore a function of factors such as its quality, rarity, contribution to landscape character, degree to which the particular element can be replaced and cultural associations or designations that apply. A particular feature may be more ‘sensitive’ in one location than in another often as a result of local values associated with the feature or in relation to its function as a key or distinctive characteristic of that local landscape. Therefore it is not possible to simply place different types of landscape features into sensitivity bands. Where individual landscape features are affected, professional judgement is used as far as possible to give an objective evaluation of its sensitivity. Justification is given for this evaluation where necessary.

Both the susceptibility and value of individual landscape features has been described as very high, high, medium, low or very low. These are then combined in order to establish an overall nature or sensitivity of individual landscape features which has also been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF LANDSCAPE CHARACTER

Sensitivity of landscape character is also assessed through a consideration of both the susceptibility to a development of the type proposed and the value attached to the landscape. In the case of the potential for effects on landscape character, susceptibility means the ability to accommodate the proposed development without undue consequences for the existing characteristics of the site. What is meant by the value of the landscape in a Landscape and Visual Impact Assessment is the relative value that is attached to the landscape by society as a whole, bearing in mind that different stakeholders may have differing values regarding any given landscape. Paragraphs 5.20 and Box 5.1 of GVLIA set out a range of factors that can contribute to an understanding landscape value. Consideration of whether there are any formal landscape designations covering a landscape is one element of considering the value, but also relevant is the condition of the landscape, its rarity in the local area, the recreational value it provides, and any ecological or heritage importance the landscape may hold. These are considered alongside its perceptual qualities (such as tranquillity) and any associations which may be held with the landscape, such as if it has been highlighted in art, music or poetry. Further clarification on how to consider the matter of landscape value is set out in the Landscape Institute Technical Guidance Note (02/21) ‘Assessing the Value of Landscapes Outside National Designations’ .

In this appraisal, the nature or sensitivity of landscape character is considered with reference to published landscape character areas/types and where relevant local landscape units as defined in this LVA for the purposes of this study. Information regarding the key characteristics of these local character areas/units has been extrapolated from relevant published studies where possible and combined with observations from on-site appraisal. With judgments undertaken employing professional judgement.

Both the susceptibility and value of landscape character has been described as very high, high, medium, low or very low. These are then combined in order to establish an overall nature or sensitivity of landscape character which has also been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF VISUAL RECEPTORS

The nature or sensitivity of a visual receptor group also reflects their susceptibility to change and the value associated with the specific view in question. It varies depending on a number of factors such as the occupation of the viewer, their viewing expectations, duration of view and the angle or direction in which they would see the site. Whilst most views are valued by someone, certain viewpoints are particularly highly valued for either their cultural or historical associations and this can increase the sensitivity of the view. The following criteria are provided for guidance only and are not exclusive:

- Very Low Sensitivity – People engaged in industrial and commercial activities or military activities.
- Low Sensitivity - People at their place of work (e.g. offices); short - medium stay patients at hospital, shoppers; users of trunk/major roads and passengers on commercial railway lines (except where these form part of a recognised and promoted scenic route).
- Medium Sensitivity - Users of public rights of way and minor roads which do not appear to be used primarily for recreational activities or the specific enjoyment of the landscape; recreational activities not specifically focused on the landscape (e.g. football); motel users.
- High Sensitivity – Residents at home; users of long distance or recreational trails and other sign posted walks; users of public rights of way and minor roads which appear to be used for recreational activities or the specific enjoyment of the landscape; users of caravan parks, campsites and 'destination' hotels; tourist attractions with opportunities for views of the landscape (but not specifically focused on a particular vista); slow paced recreational activities which derive part of their pleasure from an appreciation of setting (e.g. bowling, golf); allotments.
- Very High Sensitivity - People at recognised vantage points (often with interpretation boards), people at tourist attractions with a focus on a specific view, visitors to historic features/estates where the setting is important to an appreciation and understanding of cultural value.

It is important to appreciate that it is the visual receptor (i.e. the person) that has a sensitivity and not a property, public right of way or road. Therefore, a large number of people may use a motorway for example but this does not increase the sensitivity of the receptors using it. Conversely, a residential property may only have one person living in it but this does not reduce the sensitivity of that one receptor. The number of receptors affected at any given location may be a planning consideration, but it does not alter the sensitivity of the receptor group.

Where judgements are made about the sensitivity of assessment viewpoints, the sensitivity rating provided is an evaluation of the sensitivity of the receptor group represented by the viewpoint and not a reflection of the number of people who may experience the view.

NATURE (MAGNITUDE) OF EFFECTS – GENERAL NOTE

The following discussion sets out the approach adopted in this LVA in relation to a specific issue arising in GLVIA3 which requires a brief explanation.

Prior to the publication of GLVIA3, LVA practice had evolved over time in tandem with most other environmental disciplines to consider significance principally as a function of two factors, namely: sensitivity of the receptor and magnitude of the effect (the term 'magnitude' being a word most commonly used in LVA and most other environmental disciplines to describe the size or scale of an effect).

Box 3.1 on page 37 of GLVIA3 references a 2011 publication by IEMA entitled 'The State of EIA Practice in the UK' which reiterates the importance of considering not just the scale or size of effect but other factors which combine to define the 'nature of the effect' including factors such as the probability of an effect occurring and the duration, reversibility and spatial extent of the effect.

The flow diagram on page 39 of GLVIA3 now suggests that the magnitude of effect is a function of three factors (the size/scale of the effect, the duration of the effect and the reversibility of the effect).

For clarification, the approach taken in this LVA has been to consider magnitude of effect solely as the scale or size of the effect in the traditional sense of the term 'magnitude'. Having identified the magnitude of effect as defined above the LVA also describes the duration and reversibility of the identified effect before drawing a conclusion on the overall level of effect taking all of these factors into account.

In the context of the above discussion the following criteria have been adopted to describe the magnitude of effects.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE FEATURES

Professional judgement has been used as appropriate to determine the magnitude of direct physical effects on individual existing landscape features using the following criteria as guidance only:

- Very Low Magnitude of Change - No loss or alteration to existing landscape features;
- Low Magnitude of Change - Minor loss or alteration to part of an existing landscape feature;
- Medium Magnitude of Change - Some loss or alteration to part of an existing landscape feature;
- High Magnitude of Change - Major loss or major alteration to an existing landscape feature;
- Very High Magnitude of Change - Total loss or alteration to an existing landscape feature.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE CHARACTER

The magnitude of effect on landscape character is influenced by a number of factors including: the extent to which existing landscape features are lost or altered, the introduction of new features and the resulting alteration to the physical and perceptual characteristics of the landscape. Professional judgement has been used as appropriate to determine the magnitude using the following criteria as guidance only. In doing so, it is recognised that usually the landscape components in the immediate surroundings have a much stronger influence on the sense of landscape character than distant features whilst acknowledging the fact that more distant features can have an influence on landscape character as well.

- Very Low Magnitude of Change - No notable loss or alteration to existing landscape features; no notable introduction of new features into the landscape; and negligible change to the key physical and/or perceptual attributes of the landscape.
- Low Magnitude of Change - Minor loss or alteration to existing landscape features; introduction of minor new features into the landscape; or minor alteration to the key physical and/or perceptual attributes of the landscape.
- Medium Magnitude of Change - Some notable loss or alteration to existing landscape features; introduction of some notable new features into the landscape; or some notable change to the key physical and/or perceptual attributes of the landscape.

- High Magnitude of Change - A major loss or alteration to existing landscape features; introduction of major new features into the landscape; or a major change to the key physical and/or perceptual attributes of the landscape.
- Very High Magnitude of Change - Total loss or alteration to existing landscape features; introduction of dominant new features into the landscape; a very major change to the key physical and/or perceptual attributes of the landscape.

NATURE (MAGNITUDE) OF EFFECTS ON VIEWS AND VISUAL AMENITY

Visual effects are caused by the introduction of new elements into the views of a landscape or the removal of elements from the existing view.

Professional judgement has been used to determine the magnitude of impacts using the following criteria as guidance only:

- Very Low Magnitude of Change - No change or negligible change in views;
- Low Magnitude of Change - Some change in the view that is not prominent but visible to some visual receptors;
- Medium Magnitude of Change - Some change in the view that is clearly notable in the view and forms an easily identifiable component in the view;
- High Magnitude of Change - A major change in the view that is highly prominent and has a strong influence on the overall view.
- Very High Magnitude of Change – A change in the view that has a dominating or overbearing influence on the overall view.

Using this set of criteria, determining levels of magnitude is primarily dependant on how prominent the development would be in the landscape, and what may be judged to flow from that prominence or otherwise.

For clarification, the use of the term ‘prominent’ relates to how noticeable the features of the development would be. This is affected by how close the viewpoint is to the development but not entirely dependent on this factor. Other modifying factors include: the focus of the view, visual screening and the nature and scale of other landscape features within the view. Rather than specifying crude bands of distance at which the proposed development would be dominant, prominent or incidental to the view etc, the prominence of the proposed development in each view is described in detail for each viewpoint taking all the relevant variables into consideration.

TYPE OF EFFECT

The assessment identifies effects which may be ‘beneficial’, ‘adverse’ or ‘neutral’. Where effects are described as ‘neutral’ this is where the beneficial effects are deemed to balance the adverse effects.

DURATION OF EFFECT

For the purposes of this appraisal, the temporal nature of each effect is described as follows:

- Long Term – over 5 years
- Medium Term – between 1 and 5 years
- Short Term – under 1 year

REVERSIBILITY OF EFFECT

The LVA also describes the reversibility of each identified effect using the following terms:

- Permanent – effect is non reversible
- Non-permanent – effect is reversible

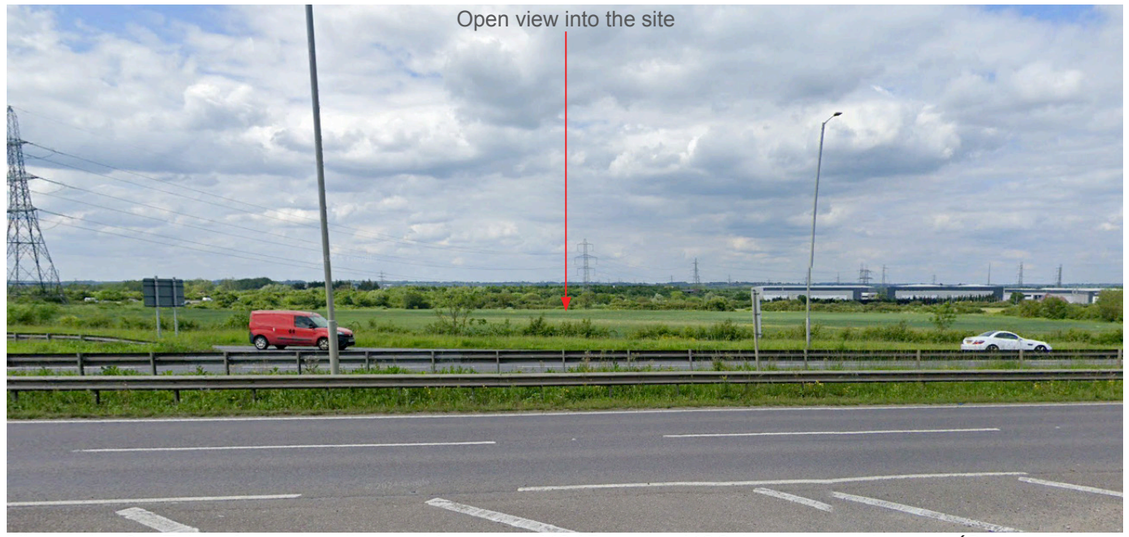
LEVEL OF EFFECT

The purpose of an LVA when produced outside the context of an EIA is to identify the relative level of effects on landscape and visual amenity arising from the proposed development. The judgements provided within the LVA may then inform the planning balance to be carried out by the determining authority.

In this LVA, the relative level of the identified landscape and visual effects has been determined by combining judgements regarding the sensitivity of the landscape or view, magnitude of change, duration of effect and the reversibility of the effect. The level of effect is described as Major, Major/Moderate, Moderate, Moderate/Minor or Minor. No Effect may also be recorded as appropriate where the effect is so negligible it is not even noteworthy. In determining the level of residual effects, all mitigation measures are taken into account

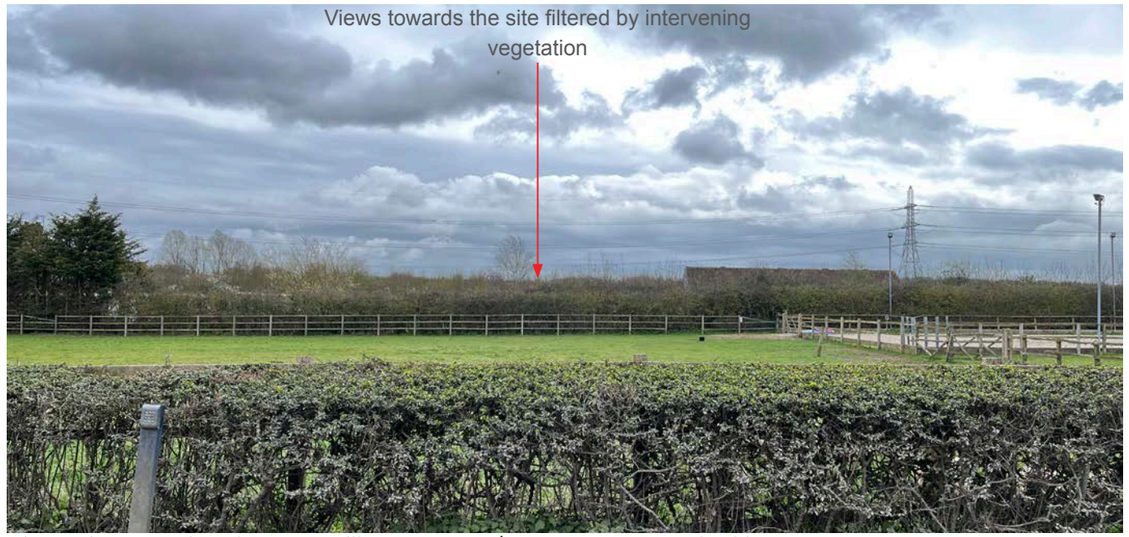
APPENDIX 2: PHOTOGRAPHIC RECORD

Viewpoint 1 - Taken from the slip road to the A127, looking north-west

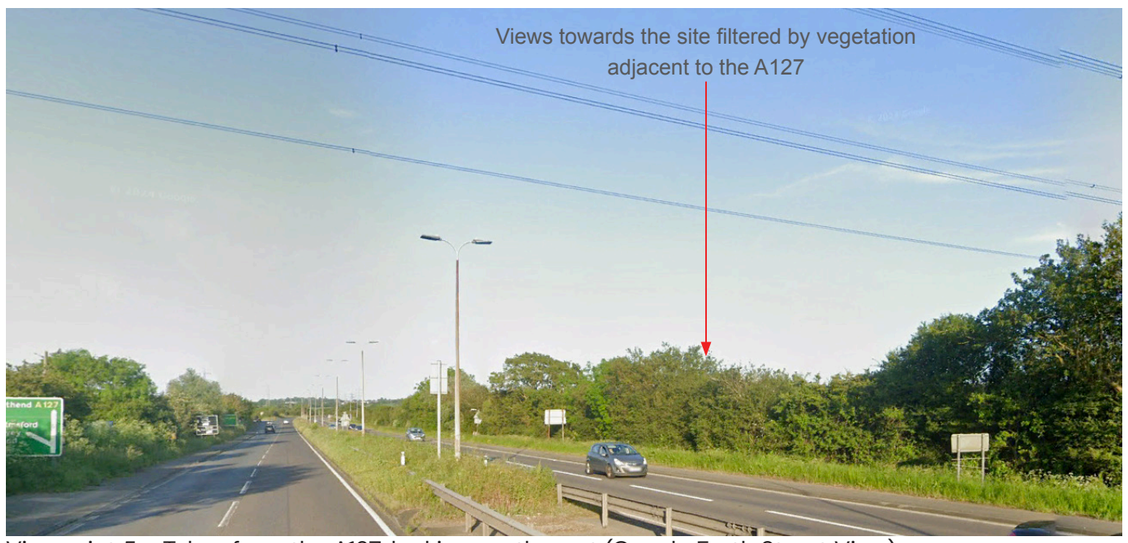


Viewpoint 2 - Taken from the slip road from the A1245 to the A130, looking north-west (Google Earth Street View)

Viewpoint 3 - Taken from the slip road along the A130, looking north-east (Google Earth Street View)

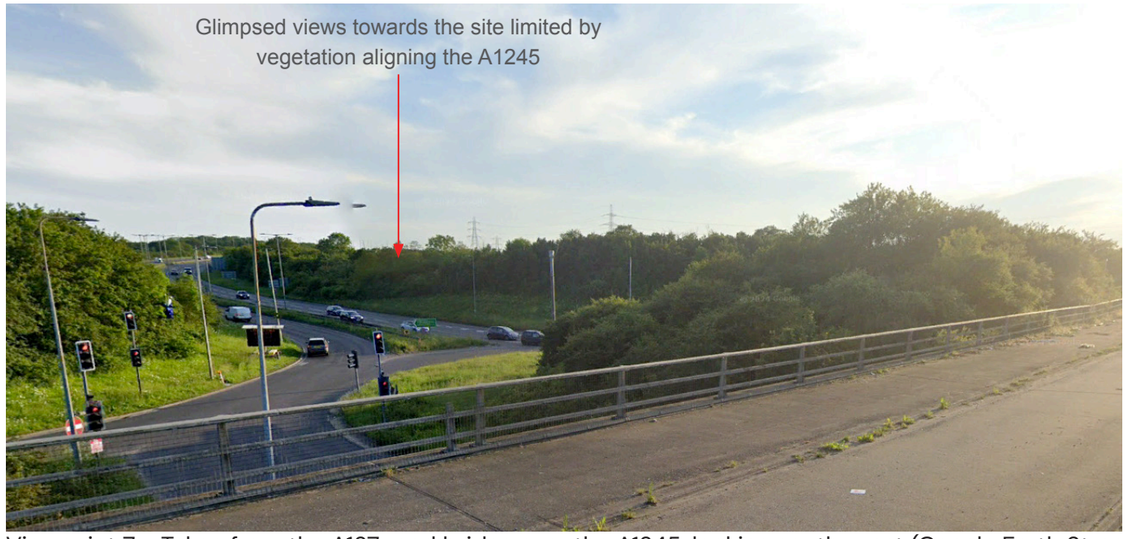


Viewpoint 4 - Taken from Bonvilles Cottages/PROW FP 149 317, looking east

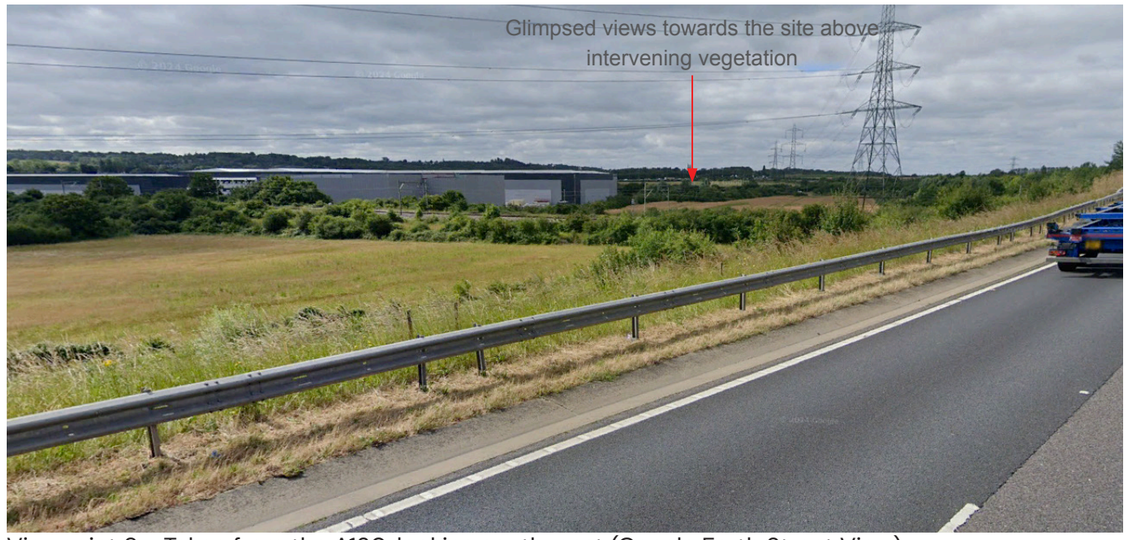


Viewpoint 5 - Taken from the A127, looking south-east (Google Earth Street View)

Viewpoint 6 - Taken from the A127 close to the junction with Bonvilles Cottages, looking east



Viewpoint 7 - Taken from the A127 road bridge over the A1245, looking south-west (Google Earth Street View)



Viewpoint 8 - Taken from the A130, looking south-east (Google Earth Street View)

Viewpoint 9 - Taken from Great Wheatley Road/PROW FP 24 289 (Google Earth Street View)

PEGASUS GROUP

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