

Thurrock Council, Civic Offices
New Road, Grays
RM17 6SL

4 August 2026

Your Reference: EN02007
Interested Party Number: [REDACTED]

[REDACTED]
Lead Member of the Examining Authority
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Dear [REDACTED],

Application by National Grid Electricity Transmission (NGET) for a Development Consent Order (DCO) for the proposed Norwich to Tilbury Project (Application Reference: EN020027)

Thurrock Council's Submission for Deadline 8

Following receipt of the Rule 8 letter dated 17 February 2026 Thurrock Council is writing to provide a response to the points raised as requirements of Deadline 8, as set out in the final examination timetable attached as Annex A.

- ***closing statements from interested parties with a summary of matters that they have previously raised during the examination which have not been resolved to their satisfaction (if desired).***

The Council's response to this point is attached in Thurrock Council's Closing Statement.

- ***any further information requested by the ExA under rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010***

The Council's response to this point is attached in Appendix A – Thurrock Council's response to Rule 17 Letter dated 27 July 2026 and supported by Appendix B – Thurrock Landscape Sensitivity and Capacity Study May 2026.

- ***the applicant's updated documents and application guide***
- ***comments on any further information/ submissions received by Deadline 7***

The Council's response to these points is attached in Appendix C – Thurrock Council's Comments on the Applicants Updated Documents.

Yours sincerely,



Interim Major Infrastructure Officer

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Appendix A – Thurrock Council's response to the Rule 17 Letter dated 27 July 2026

1. Response to Question a)

a) Will the funds be available for any suitable projects within the designated landscape compensation, offsetting and enhancement areas, or just within the 2 or 3km buffer areas?

1.1 The Applicant has communicated to Thurrock Council that the landscape compensation funds would be available for eligible projects within the defined areas shown on the plans accompanying Schedule 20 of the DCO. Thurrock Council does not object to this position.

2. Response to Question b)

b) How would such areas or projects relate to landscape character areas or visual receptors which may be affected by the proposed development?

2.1 Landscape compensation would contribute to mitigation measures that would offset the adverse effects of the development and contribute towards the restoration and enhancement objectives identified in the Landscape Sensitivity and Capacity Study, which was carried out by external consultants Arup in May 2026 (Appendix B). The 2026 Study has further enabled Thurrock Council to understand the areas affected by the proposed development and how projects related to landscape character and visual receptors can mitigate these effects.

2.2 Paragraph 13.7.17 of the Applicant's Landscape and Visual assessment [REP7-260] concludes that Thurrock Landscape Character Assessment area LCA H1 is predicted to experience major and significant (adverse) effects and moderate and significant (adverse) effects as a result of the proposed development. The 2026 Study identifies LCA H1, within which the proposed substation is located, as having the following landscape condition:

'Semi-rural and open character, as a result of regular, large-sized agricultural fields bounded by gappy hedgerows and relatively few trees (much lost post-1950, including due to Dutch Elm disease); Relatively good (Grade 2) agricultural soils; Much of the landscape has been changed since the 1950s; There has been field boundary loss since the 1950s and this, combined with the previous loss of elm, has resulted in a landscape with relatively little tree cover; Mineral workings and landfill sites have altered landform and cover.'

2.3 Its perceptual qualities (wildness and tranquillity) are described as:

'Landscape with moderate sense of tranquillity/rurality. Although this is a predominantly rural agricultural landscape, it is influenced by nearby built form and industry in adjacent areas as well as transport

corridors and pylons in this area; The A13 fragments the landscape and pylons have reduced the rural character of the landscape.'

- 2.4 Table 38 of the Study sets out the susceptibility and sensitivity of LCA H1 to change under a range of development scenarios. For all forms of development other than small and minor housing schemes, susceptibility to change is assessed as either 'High' or 'Very High', with sensitivity consistently rated 'High'. The 2026 Study notes that the introduction of additional development into this open, rural landscape is likely to be visually prominent with the potential to further erode its rural character. These consistently high susceptibility and sensitivity ratings demonstrate that the landscape has limited capacity to accommodate substantial new development without adverse effects on its character.
- 2.5 The landscape is particularly sensitive to large-scale infrastructure development. The proposed substation, together with associated infrastructure and related built elements, would introduce prominent infrastructure features into an open rural landscape that the Study identifies as highly susceptible to change. The development would also affect a landscape already subject to external pressures from existing infrastructure, industrial development and transport corridors, thereby contributing to cumulative effects and further exacerbating the erosion of rural character identified in the Study.
- 2.6 The nearest area assessed in greater detail to the substation site, Cluster 11: East Tilbury (page 158 of the May 2026 Study), identifies landscape improvement opportunities including hedgerow enhancement, habitat restoration and enhancement, and the development of landscape and ecological corridors to restore elements of landscape character.
- 2.7 While the May 2026 Study identifies that this landscape has been subject to substantial historic change, the proposed substation would introduce further large-scale infrastructure into an area already influenced by pylons, transport corridors and industrial uses. The resulting residual landscape and visual effects would contribute to the ongoing reduction in rural character and tranquillity identified in both the May 2026 Study and the Applicant's LVIA. Landscape compensation measures directed towards hedgerow restoration, woodland planting and the strengthening of green infrastructure would therefore contribute towards restoring landscape structure and character that has been progressively diminished over time.

3 Response to Question c)

c) Provide your succinct views on how the masterplans would meet (or otherwise) the relevant tests for requirements and obligations set out in paragraphs 4.1.16 to 4.1.18 of NPS EN-1 (November 2023).

- 3.1 The masterplans provided by National Grid are indicative, and it is anticipated that Thurrock Council would seek to refine and tailor any proposals to ensure they are both deliverable and effective in restoring and enhancing the affected landscape character. The masterplans are capable of meeting the relevant tests in paragraphs 4.1.16 to 4.1.18 of NPS EN-1 (November 2023) provided they enable Thurrock Council to use the landscape compensation in areas affected by the proposed development and make it more acceptable in planning terms.

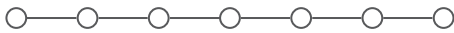
- 3.2 In relation to paragraphs 4.1.16–4.1.18, the masterplans and landscape compensation proposals are considered directly relevant as the development would cause new environmental effects experienced by communities and add to the cumulative pressures already imposed on a landscape that is subject to multiple large-scale infrastructure and development proposals. It is not possible to fully mitigate the effects of a substation and associated pylons of the proposed scale on landscape character and visual receptors through on-site mitigation alone. Compensation is therefore considered an appropriate and reasonable response to the residual effects of the development.
- 3.3 The masterplans should reflect the scale and extent of the landscape and visual effects arising from the proposed development. The proposed 3km compensation area broadly corresponds with the area within the ZTV (Zone of Theoretical Visibility), and within which landscape and visual effects are assessed and most affected landscape character areas and visual receptors are located. The 3km radius also ensures that compensatory measures remain geographically related to the affected landscape character area and to those communities and receptors experiencing the effects of the development. The masterplans therefore provide an appropriate framework for compensatory measures to be directed towards communities experiencing adverse effects of the development.
- 3.4 The proposed substation and associated infrastructure would give rise to residual landscape and visual effects that could not be fully mitigated through on-site planting alone, given the scale, nature and operational requirements of the development. By directing compensatory landscape measures towards the affected landscape character areas and visual receptor locations, principally LCA H1 and towards locations where visual receptors experience the development, including public rights of way and nearby settlements such as Chadwell St Mary and East Tilbury, opportunities would arise to strengthen landscape structure, restore hedgerow and woodland networks, and enhance the wider green infrastructure framework.
- 3.5 The proposed measures would contribute to landscape restoration and also enhance the experience of users of public rights of way, local communities and other visual receptors, through the introduction of additional woodland, hedgerow and green infrastructure features.

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Revision	Date	Filename
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		Prepared by Checked by Approved by
		Name [Redacted]
		Signature [Redacted]



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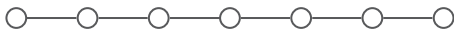
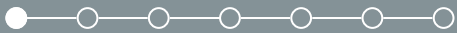
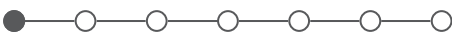


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SECTION 1

Introduction



1.1 Introduction

1.1.1 Context

Thurrock Council (hereafter “the Council”) is preparing a new Local Plan, which will set out the overall planning framework to support growth and development across the whole borough through to 2040. Once adopted, it will replace the following documents:

- Core Strategy and Policies for Management of Development (Core Strategy), Jan 2015
- Schedule of saved policies of the Borough Local Plan, Sep 1997
- Essex Minerals Local Plan – Adopted First Review, Jan 1997

Thurrock lies within the Thames Gateway South Essex (TGSE), a national priority area for social and economic development. As a consequence, large numbers of houses, jobs and associated infrastructure are being proposed in the area. This includes the recently consented Lower Thames Crossing (LTC) and the London Gateway Port. In preparation for the new Local Plan, the Council issued a call for sites to be submitted by 31 January 2025. These sites will be included in the Council’s Housing Land Availability Assessment and Employment Land Availability Assessment, which are technical studies that will help identify development sites for the new Thurrock Local Plan.

Growth and development bring inevitable change to the landscape and understanding the potential consequence of these changes is important in the planning process. This study provides evidence to support the allocation of sites for housing and employment uses and to assist in the preparation and assessment of planning applications. The study will also inform the management of future change through regeneration and strategic partnerships, with the ultimate goal of achieving good design and placemaking.

1.1.2 Structure

This document is structured as follows and should be read alongside the evidence set out in the ‘Thurrock Integrated Landscape Character Assessment - Part 1’ (LUC, 2018) and the ‘Thurrock Integrated Landscape Character Assessment - Part 2’ (LUC, 2018):

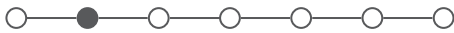
- Section 3: Part A - Landscape sensitivity assessment
- Section 4: Part B - Landscape capacity assessment
- Section 5: Part C - Compendium of Nature-based Solutions (NbS)

The term ‘landscape’ within this study refers to both the countryside and urban areas (sometimes also referred to as ‘townscape’) and also includes the open water of the tidal River Thames.



SECTION 2

Methodology



2.1 Introduction

Natural England published ‘An approach to landscape sensitivity assessment – to inform spatial planning and land management’ in 2019 (Natural England, 2019).

This document replaced previous guidance presented in Topic Paper 6, which addressed techniques and criteria for judging capacity and sensitivity published jointly by Scottish Natural Heritage and the former Countryside Agency in 2004.

Section 1.1 of Natural England’s approach to landscape sensitivity assessment notes that in the past there has been confusion concerning the use of the words ‘sensitivity’ and ‘capacity’ and that often they have been used interchangeably in published assessments. The distinction it draws is between sensitivity “to what” and capacity to accommodate “how much” change, raising the question that the concept of capacity may be too simplistic when it comes to making complex decisions to inform objectives and guidance regarding place-based planning, design, and management. Natural England’s approach does not therefore deal with how to carry out a landscape capacity assessment and favours a sequential, transparent and auditable approach to assessing landscape sensitivity to particular development scenarios. This is the approach adopted in this assessment.

2.2 Landscape sensitivity assessment

The approach advocated by Natural England to assessing landscape sensitivity is similar to that laid out in the 'Guidelines for Landscape and Visual Impact Assessment, third edition (GLVIA3)' (Landscape Institute and Institute of Environmental Management & Assessment, 2013).

The main difference is that in Landscape and Visual Impact Assessment (LVIA), the assessment of magnitude of impact informs judgements on significance of effects with regard to a specific development proposal. In landscape sensitivity assessment, a more strategic assessment is undertaken often across a very large area, with regard to the principle of a particular type of change scenario to inform strategic spatial planning and land management. This approach is summarised in Figure 1 below:

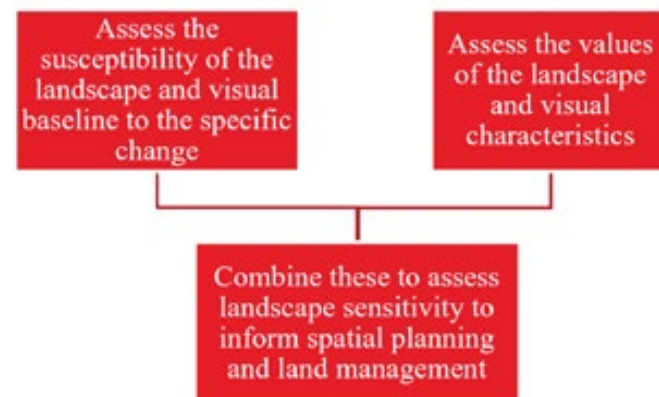


Figure 1: Approach to assessing landscape sensitivity

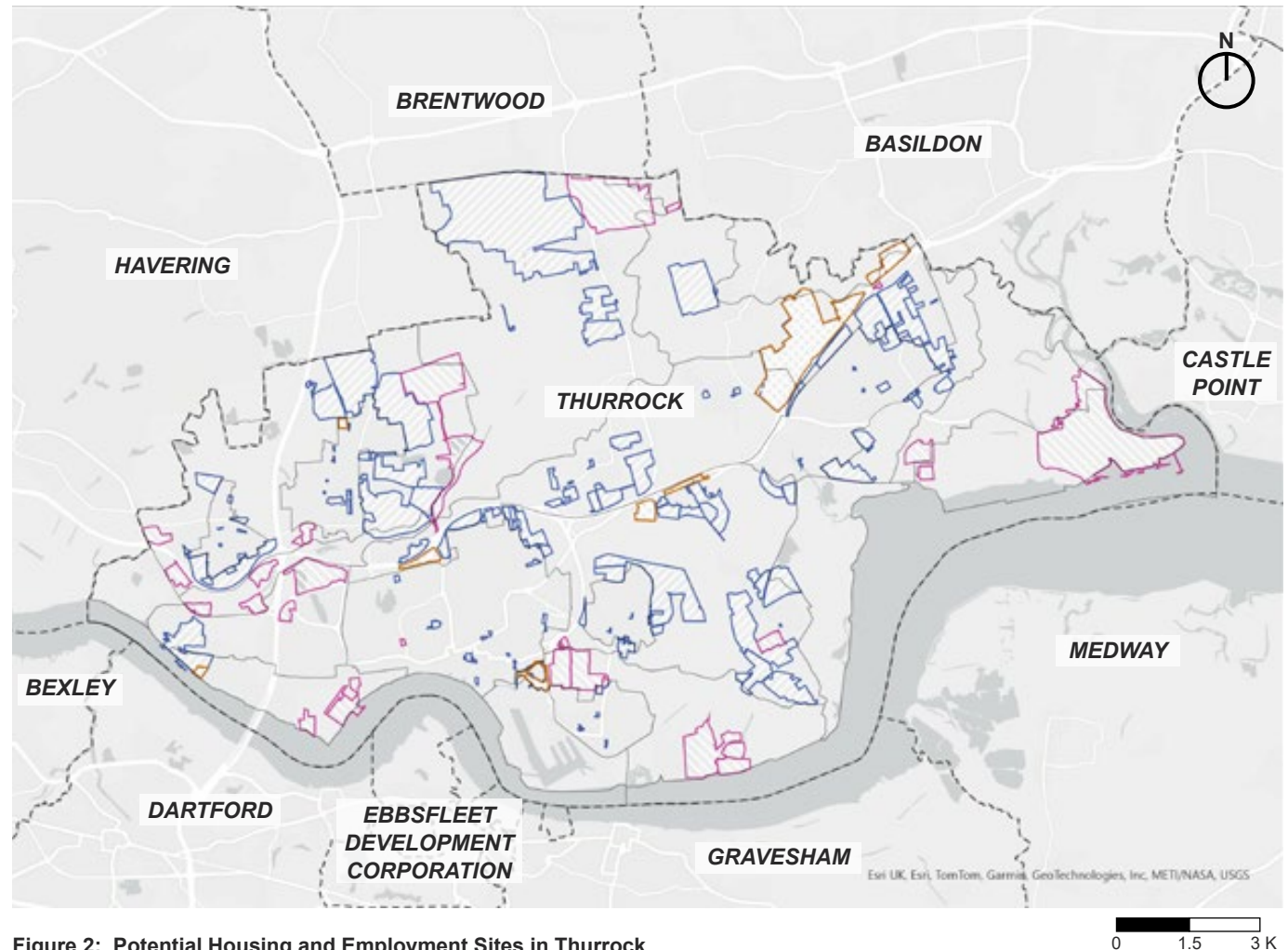
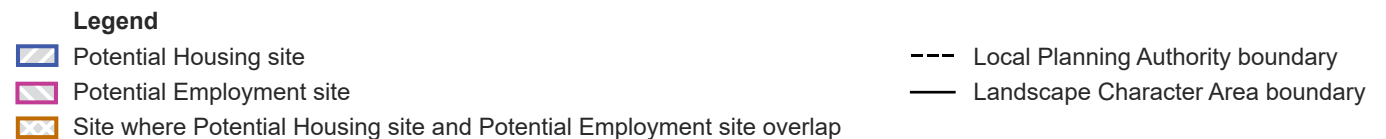
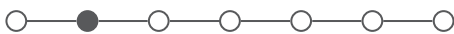


Figure 2: Potential Housing and Employment Sites in Thurrock





SECTION 2: METHODOLOGY

2.2.1 Assessment process

The landscape sensitivity assessment has followed a four-step process, which is set out in the sections below.

Step 1: Define the purpose and scope of the landscape sensitivity assessment and prepare the brief

The Council convened a working group early in the project to agree the scope and required outputs of the landscape sensitivity assessment. This group included officers with skills and experience in landscape planning, urban design and ecology. These requirements were set out in the brief provided to Arup, which was summarised as follows.

The geographical extent of the study area for this assessment is the land within the borough boundary. This landscape sensitivity assessment is structured around the Landscape Character Areas (LCAs) described in the ‘Thurrock Integrated Landscape Character Assessment - Part 2’ (LUC, 2018). These form the assessment units for the study. Natural England notes in its approach to landscape sensitivity assessment that findings and reporting may be generalised across the assessment units and that it must be accepted that sensitivity to particular developments is likely to vary within LCAs.

Arup has organised the final selection of housing and employment sites provided by Thurrock Council following a two-stage sifting exercise in October 2025 into clusters. All the potential housing and employment sites identified as part of Thurrock’s sifting process are mapped in Figure 2 above.

Both potential housing and employment sites have been grouped together in each cluster in order to promote integrated responses to new development.

These clusters generally correspond with existing settlements and respond to both infrastructure barriers and significant land features. These clusters are mapped in Figure 28 (in Section 4: Part B).

The brief directed Arup to assess the sensitivity of the landscape to development scenarios, defined in section 4 of the ‘Thurrock Integrated Landscape Character Assessment - Part 1’ (LUC, 2018). Typical descriptions of these development scenarios are provided in Table 1 below.

Step 2: Gather information to inform the landscape sensitivity assessment (desk study and field study)

As noted above, the assessment units for this study are the LCAs defined and described in the ‘Thurrock Integrated Landscape Character Assessment - Part 2’ (LUC, 2018). Various changes were noted in the preface of this document in 2022, reflecting development that had occurred since the original assessment was published. A further three years have passed and there have been further changes to the baseline. Arup undertook fieldwork in November 2025 to record the principal changes, but the LCAs defined in the 2018 document have not been updated.

Step 3: Assess landscape sensitivity of the assessment units (desk study and field study) **Landscape value**

The value attached to the landscape has been assessed for all 24 LCAs defined and described in the ‘Thurrock Integrated Landscape Character Assessment - Part 2’ (LUC, 2018) because this relates to the baseline and is independent of the development scenarios. Section 2.3 of Natural England’s approach to landscape sensitivity assessment notes that the value(s) of landscapes and their component parts can be ascertained qualitatively with reference to, for example:

- a. Designations, which may be international, national (for example National Park, Area of Outstanding Natural Beauty, Site of Special Scientific Interest, Conservation Area, Listed Buildings), or local (refer to the Local Plan);
- b. Their character and sense of place;
- c. Valued attributes, such as topography, perceptual qualities, cultural and historic features and associations, biodiversity, National Landscapes / National Park special qualities etc.;
- d. Community values;
- e. Recreational value;
- f. Intrinsic value.

Subsequently, the Landscape Institute published the ‘Technical Guidance Note (LI TGN) 02/21: Assessing landscape value outside national designations’ (Landscape Institute, 2021), which supplements the approach outlined by Natural England and has been used to inform this landscape sensitivity assessment. LI TGN 02/21 defines landscape value as the relative value or importance attached to different landscapes by society on account of their landscape qualities in line with GLVIA3 and Natural England’s definition. It clarifies that landscape value means more than popularity and suggests that value assessments should be undertaken by a landscape professional, drawing on evidence from stakeholders where available. This guidance recommends that indicators of value should be reviewed on a case-by-case basis, taking into account what they contribute (positively or negatively) to a specific landscape and that once evidence for each factor has been collated and assessed, an overall judgement should be made by considering the overall ‘weight of evidence’. The approach to assessing the value attached to the landscape has followed a three-stage process:

SECTION 2: METHODOLOGY

- **Stage 1:** Identify if the landscape is covered by any landscape designations;
- **Stage 2:** Consider each of the factors listed in Table 2 below which have been developed with reference to Table 1 of TGN 02/21 and are pertinent and most important to understanding its value; and
- **Stage 3:** Make an assessment of the value attached to the landscape and assign value based on a five-point scale, clearly articulating the reasons for these judgements.

An overall conclusion has been drawn on the value to the landscape for each LCA considering the overall weight of evidence.

Susceptibility to change

Natural England defines landscape susceptibility as “the degree to which a defined landscape and its associated visual qualities and attributes might respond to the specific development type / development scenario or other change without undue negative effects on landscape character and the visual resource.” It recommends that brief descriptive indicators of relative susceptibility are developed for each of the selected criteria within each assessment unit. This should be done by describing how the landscape, visual, and value related criteria, may be affected to a greater or lesser extent by the key attributes of the proposed development types. Annex 2 of Natural England’s approach to landscape sensitivity assessment provides examples of criteria and indicators of susceptibility to various development types, including housing and employment development. Criteria have been developed to inform judgements on the susceptibility of LCAs to the development scenarios in Table 1, as set out in Table 3 below.

Consideration has also been given to the potential impacts on landscape character and indicators of areas with lower sensitivity (susceptibility to change) listed in Table 4.2 of the ‘Thurrock Integrated Landscape Character Assessment - Part 1’ (LUC, 2018) which have been for the most part reproduced in Table 4 below. However, there are existing discrepancies in the Landscape Character Assessment, namely:

- The ‘Large housing area’ category includes areas that contain between 1,000 and 3,999 dwellings while the ‘Very large housing area’ category includes areas that contain over 3,000 dwellings. This results in areas containing between 3,000 and 3,999 dwellings potentially falling into two categories.
- The ‘Substantial housing area’ category includes areas that contain between 300 and 499 dwellings; the category above, the ‘Large housing area’ category includes areas that contain between 1,000 and 3,999 dwellings. This results in areas containing between 500 and 999 dwellings not having an assigned category.

Minor adjustments have been made to address these issues, which are included within Tables 1 and 4 below.

The scale of potential housing development set out in Table 1 above varies substantially. Furthermore, there are LCAs that are either not sufficiently large or comprise extensive development within existing urban areas which precludes some development scenarios. Where development scenarios are not applicable to certain LCAs, the susceptibility to change and the overall sensitivity of these LCAs has not been assessed. The criteria in Table 5 below have been used to inform final judgements on the susceptibility to change.

Landscape sensitivity

Natural England defines landscape sensitivity within the context of spatial planning and land management as “a term applied to landscape character and the associated visual resource, combining judgements of their susceptibility to the specific development type / development scenario or other change being considered together with the value(s) related to that landscape and visual resource.” It goes on to state that “landscape sensitivity may be regarded as a measure of the resilience, or robustness, of a landscape to withstand specified change arising from development types or land management practices, without undue negative effects on the landscape and visual baseline and their value.”

Assessing the sensitivity of the landscape has followed a systematic process of combining judgements on the value attached to the landscape and the susceptibility to change of each LCA for each development scenario using a matrix (see Figure 3 below). A five-point scale has been adopted, in line with Natural England’s advice. The final five sensitivity criteria are described in Table 6 below.

The sensitivity of each LCA has been reviewed and clarified on site through fieldwork, including relationships between assessment units, for example intervisibility and physical habitat connections.

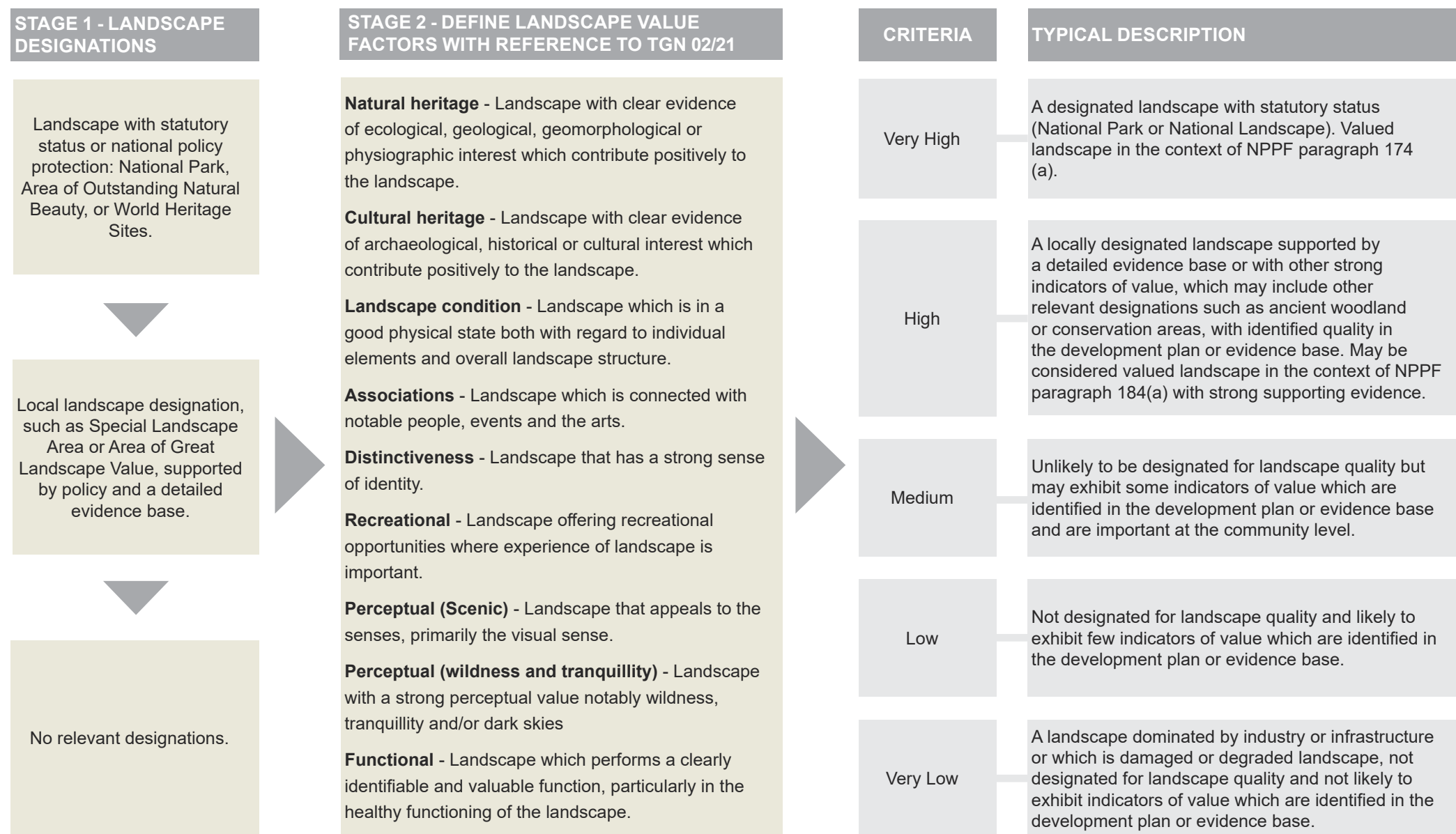
Step 4: Reporting

The conclusions of the landscape sensitivity assessment for each LCA are set out in Section 3: Part A below.

Table 1: Development scenarios

TYPE	DEVELOPMENT SCENARIO	TYPICAL DESCRIPTION
Housing	Very large housing area Over 3,000 dwellings (over 100ha)	Sustainable urban extension including a new commercial centre and community facilities and services and mixed use. A mix of residential typologies including areas from higher density, for example 85 dwellings per hectare (dph) and buildings up to 5 to 6 storeys, to lower density, for example 25 dph up to 2.5 storeys. Open space provision to include a Community Park over 4 hectares.
Housing	Large housing area 1,000 to 2,999 dwellings (33 to 100ha)	Includes a new urban centre for community facilities and services. A mix of residential typologies including areas from medium density, for example 60 dph and buildings up to 4 storeys, and lower density for example 20 dph up to 2.5 storeys. Open space provision to include a Community Park over 4 hectares.
Housing	Substantial housing area 300 to 999 dwellings (11 to 33ha)	1) Close to centre urban areas - includes some community facilities. A mix of residential typologies including areas from very high to high density, 300 to 80dph. 2) Residential areas, high to medium density, for example 60 dph; buildings up to 4 storeys, lower density, for example 20 dph, up to 2.5 storeys 3) Rural setting, medium to low density for example terrace and single dwellings up to 2.5 storeys between 20 and 35 dph
Housing	Small housing area 75 to 299 dwellings (2.5 to 11ha)	1) Urban areas high density for example 60 dph up to 4 / 5 storeys 2) Conventional suburban development in residential areas medium density, for example 40 to 45 dph and buildings up to 3 storeys 3) Garden city residential, low density, for example terrace and single dwellings up to 2.5 storeys between 20 and 30 dph
Housing	Minor housing area Under 75 dwellings (under 2.5ha)	1) Within urban centre – a proportion of ground floor community/ commercial, 3 up to 5 / 6 storeys flats, high to very high density, for example 110 dph 2) Residential areas high to medium density for example 60 dph and buildings up to 3 storeys, and lower density for example 20 dph up to 2.5 storeys 3) Suburban /rural setting, medium to low density, for example terrace and single dwellings up to 2.5 storeys between 20 and 35 dph
Housing	Flats	5-10 storeys (15-30m in height), very high density, for example 420 dph
Employment	Major warehouse / industry	Development with individual large and bulky buildings above 50,000 cubic metres. These developments also include vehicle movements, ancillary activities/storage, and flood lighting.
Employment	Lorry parks	This category includes major lorry parks for 3.5-8ha (approximately 500 HGVs). Can include either open HGV park or private HGV park for a logistics company. Includes floodlighting and continuous HGV movements.

Table 2: Assessing the value attached to the landscape



SECTION 2: METHODOLOGY

Table 3: Susceptibility to change criteria

CRITERIA	TYPICAL DESCRIPTION
Topography and skylines	Smooth, gently undulating or featureless landforms are likely to be less sensitive to most forms of development than a landscape with a dramatic landform or distinct landform features that contribute positively to landscape character. Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to any type of development because development may alter or detract from these skylines as features in the landscape. Important landmark features on the skyline might include historic features or monuments. Low lying developments such as solar farms will typically be less easily perceived in flat landscapes than on a slope, especially higher slopes.
Landcover	Landscapes containing existing hard surfacing or built elements (e.g. urban areas, brownfield sites or large-scale horticulture) are likely to be less sensitive to built developments or solar farms than highly rural or naturalistic landscapes. Naturalistic land cover such as woodlands, salt marsh, reedbeds, orchards, meadows, heathland, unimproved or semi-improved grasslands will increase sensitivity.
Sense of openness/ enclosure	Landscapes of open and exposed character would have a higher sensitivity to all development types due to the lack of visual screening, and lesser opportunities for screening mitigation without changing character. Conversely, landscapes with a higher degree of visual containment (e.g. due to landform or vegetation) are likely to have higher potential to visually absorb built development. NB this does not apply to wind turbines or tall buildings which are likely to be visible in any case.
Scale (landform and component landscape features) and landscape pattern/ complexity	Larger scale landscapes are likely to be less sensitive to the more expansive and larger scale developments (such as larger scale transport schemes, large-scale commercial/warehouse/port development, larger wind farms, and major mineral extraction or waste sites). Existing human scale features in the landscape in the form of existing buildings or trees, or small-scale intricate landscape patterns will also increase sensitivity to these larger scale developments. Developments that fit the scale of the landscape, both in terms of overall landscape pattern and individual features, will result in lower levels of impact (landscape sensitivity to developments of an appropriate size and scale will be lower).
Relative sense of tranquillity and sense of rurality; current level of human influence/ development	Landscapes that are relatively tranquil (due to freedom from human activity and disturbance and having a perceived naturalness) or that have a strong feel of traditional rurality with few modern human influences tend to increase levels of sensitivity to all types of built development compared to landscapes that contain signs of similar development.
Time depth	Historic landscape types (HLTs) such as commons, unimproved intertidal or marine marsh, and pre-18th century enclosure will have a higher sensitivity to any forms of development due to their strong historic qualities and time depth they give to the landscape. This is valued in an area that has been subject to a great deal of change since the 1950s. [Source of information: Essex Historic Landscape Character Types].
Visual sensitivities and intervisibility	Visually prominent landscapes which form a rural backdrop are likely to be more sensitive to development than those which are not so visually prominent. Landscapes which are inter-visible with adjacent relatively tranquil/ undeveloped landscapes/ seascapes in and surrounding Thurrock, or visible from key vantage points, are likely to be more sensitive to development than those with less inter-visibility with adjacent relatively tranquil/ undeveloped landscapes/ seascapes.

SECTION 2: METHODOLOGY

Table 4: Potential impacts and indicators of susceptibility to change

TYPE	DEV. SCENARIO	POTENTIAL IMPACTS ON LANDSCAPE CHARACTER	TYPICAL DESCRIPTION
Housing	Very large housing area over 3,000 dwellings (over 100ha)	This type of development may result in direct loss of landscape features, increase the perceived human influence on the landscape and reduce the rural character of the landscape ('suburbanisation' of the landscape). Housing developments of this size including new commerce and community facilities and buildings up to 5 to 6 storeys would alter the scale of smaller scale or intimate landscapes and the character of rural landscapes.	Urban areas; large-scale landscapes with lack of history/ time depth or that have previously been altered; areas with less of a rural or wild character.
Housing	Large housing area 1,000 to 2,999 dwellings (33 to 100ha)	This type of development may result in direct loss of landscape features, increase the perceived human influence on the landscape and reduce the rural character of the landscape ('suburbanisation' of the landscape). Housing developments of this size including a new urban centre and buildings up to 4 storeys would be a notable new settlement in the landscape. This could alter the scale of smaller scale or intimate landscapes and the character of rural landscapes.	Urban areas; large-scale landscapes with lack of history/ time depth or that have previously been altered; areas with less of a rural or wild character.
Housing	Substantial housing area 300 to 999 dwellings (11 to 33ha)	This type of development may result in direct loss of landscape features, increase the perceived human influence on the landscape and reduce the rural character of the landscape ('suburbanisation' of the landscape). It is likely to have a larger impact than the small housing area or infill development, but not as great an impact as the large and very large housing schemes. Due to its size, it may appear out of scale with smaller scale or intimate landscapes.	Urban areas; large-scale landscapes with lack of history/ time depth or that have previously been altered; areas with less of a rural or wild character.
Housing	Small housing area 75 to 299 dwellings (2.5 to 11ha)	This type of development may result in direct loss of landscape features, increase the perceived human influence on the landscape and reduce the rural character of the landscape ('suburbanisation' of the landscape). It is likely to have a larger impact than the infill housing development, but not as great as the larger housing schemes.	Urban areas; brownfield sites or previously disturbed areas; landscapes with some sense of enclosure provided by vegetation; areas with less of a naturalistic or 'wild' character.
Housing	Minor housing, under 75 dwellings (or under 2.5ha)	This type of development may result in some direct loss of landscape features and change the density and character of urban areas.	Urban areas; brownfield sites or previously disturbed areas; landscapes with some sense of enclosure provided by vegetation; areas with less of a naturalistic or 'wild' character.
Housing	Flats	The main characteristic of this development that sets it aside from the developments above is its height: up to 10 storeys. Development of this type may be particularly visible in the landscape and indicative of an 'urban' situation – resulting in potentially adverse effects on landscapes that are rural in character.	Urban areas; areas with existing tall buildings or high bunds/ landforms that could provide shelter/screening for up to 10 storeys.
Employment	Major warehouse / industry	Very large and bulky buildings (above 50,000 cubic metres) can result in direct loss of landscape features as well as introducing very bulky structures into the landscape, blocking views, increasing industrial character, and altering landscape scale and texture. The scale of the features may be particularly apparent when viewed from above or from elevated locations. The vehicle movements, ancillary activities/ storage, and flood lighting associated with these developments can also adversely affect the character of rural landscapes and increase lighting at night.	Urban areas and brownfield sites; large-scale landscapes; landscapes with some sense of enclosure or visual screening; not overlooked; areas with existing levels of activity.
Employment	Lorry parks	Development of a lorry park could result in direct loss of landscape features as well as affect the character of more rural or undeveloped areas. This type of development may be particularly visible in open landscapes or where overlooked. On a sunny day reflected light from vehicles can enhance visibility. The activity arising from the continual movement of vehicles would increase the perceived human influence on the landscape and could adversely affect 'still' or tranquil landscapes. The flood lighting associated with these developments would adversely affect intrinsically dark landscapes.	Brownfield sites; flat areas with a sense of enclosure/ visual screening; areas with little time depth; areas that are not overlooked; active areas and areas already affected by lighting at night.

SECTION 2: METHODOLOGY

Table 5: Susceptibility criteria

CRITERIA	TYPICAL DESCRIPTION
Very high	The type of change arising from the specific proposal is very likely to lead to undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.
High	The type of change arising from the specific proposal is likely to lead to undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.
Medium	The type of change arising from the specific proposal may lead to undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.
Low	The type of change arising from the specific proposal is unlikely to lead to undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.
Very low	The type of change arising from the specific proposal is very unlikely to lead to undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.

Figure 3: Landscape sensitivity matrix

Value → x	Very High Value	High Value	Medium Value	Low Value	Very Low Value
↓ Susceptibility					
Very High Susceptibility	Very high	Very high	High	Medium	Medium
High Susceptibility	Very high	High	High	Medium	Medium
Medium Susceptibility	High	High	Medium	Medium	Low
Low Susceptibility	High	Medium	Medium	Low	Very low
Very Low Susceptibility	Medium	Medium	Low	Very low	Very low

Table 6: Landscape sensitivity criteria

CRITERIA	TYPICAL DESCRIPTION
Very high	Landscape and / or visual characteristics of the assessment unit are very susceptible to change and / or its values are very high or high and it is unable to accommodate the relevant type of development without significant character change or adverse effects. Thresholds for significant change are very low
High	Landscape and / or visual characteristics of the assessment unit are susceptible to change and / or its values are medium through to very high. It may be able to accommodate the relevant type of development but only in limited situations without significant character change or adverse effects if defined in the relevant land parcel summary. Thresholds for significant change are low.
Medium	Landscape and / or visual characteristics of the assessment unit are susceptible to change and / or its values are low through to high and / or it may have some potential to accommodate the relevant type of development in some defined situations without significant character change or adverse effects. Thresholds for significant change are intermediate.
Low	Landscape and / or visual characteristics of the assessment unit are resilient and of low susceptibility to change and / or its values are low or very low and it can accommodate the relevant type of development in many situations without significant character change or adverse effects. Thresholds for significant change are high.
Very low	Landscape and / or visual characteristics of the assessment unit are robust or degraded and are not susceptible to change and / or its values are very low and it can accommodate the relevant type of development without significant character change or adverse effects. Thresholds for significant change are very high.

2.3 Landscape capacity assessment

As noted in section 2.1 above, Natural England’s approach to assessing landscape sensitivity alludes to the challenges of landscape capacity assessment and does not provide information on what such a study could address or how it may be carried out. Nevertheless, the Council requires advice to inform how development within the borough could come forward to support sustainable growth and respond positively to the landscape.

Section 4: Part B of this report, provides an appraisal of each of the clusters, drawing on the existing evidence base, fieldwork and the landscape sensitivity assessment. These clusters are mapped in Figure 28 (in Section 4: Part B). For each cluster, a narrative description is first provided to explain how the sensitivity of LCAs may inform the sensitivity of the landscape within these clusters to change.

Each cluster has been evaluated in terms of:

- Existing landscape features desirable to safeguard, major environmental constraints to development, and characteristics detracting from landscape character
- Opportunities for landscape enhancement and/or the creation of new green infrastructure

The landscape features and environmental constraints to development that are considered in the evaluation include:

- **Ecological designations** - Sites of Specific Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR sites,

Priority Habitats, Ancient Woodland, Local Nature Reserves (LNR), Local Wildlife Sites (LWS)

- **Heritage assets** - Conservation Areas, listed buildings, Scheduled Monuments
- **Public land** - Public rights of way, National Cycle Routes, open access land
- **Other open spaces** - Registered parks and gardens, Country parks, other recreational grounds and spaces
- **Waterways and waterbodies**
- **Other environmental designations** - Countryside Stewardship, Environmental Stewardship
- **Sites identified in the ‘Essex Local Nature Recovery Strategy’** (Essex County Council, 2025)

The maps also show the permanent land take for the proposed LTC to acknowledge its influence on the future baseline landscape.

Reference has been made to baseline mapping and published strategies, including:

- the ‘Essex Local Nature Recovery Strategy’ (Essex County Council, 2025);
- the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023); and
- the ‘South Essex Strategic Green and Blue Infrastructure Strategy’ (Alexandra Steed Urban, 2020).

These sources should continue to be used when considering opportunities.

Key opportunities for landscape integration have been identified for each cluster. These opportunities are categorised into four typologies:

- 1 Landscape corridors** – prioritises habitat health and connectivity through restoration, enhancement or creation or to maintain or enhance existing or historic landscape character. This may include the introduction of certain habitats to respond to landscape character and enhance sense of place.
- 2 Recreational corridors** – prioritises improving accessibility to the surrounding landscape and its features by promoting accessible recreational corridors primarily for walking and cycling.
- 3 Spatial buffers** – seeks to preserve and enhance certain sites and their setting through the implementation of a spatial buffer around the site or near its entrance to conserve its character.
- 4 Restoration areas** – targets interventions that seek to conserve or enhance the character of a larger area through strategic actions that extend over a wider area.

Each opportunity has been assigned nature-based solutions that could be implemented to guide future development and management of the landscape. These are described in Section 5: Part C.

It should be noted that the opportunities identified are examples. Additional opportunities should be explored that may connect to, merge with or be inspired by the examples provided, and new opportunities for landscape enhancements may emerge as new potential development sites come forward.

In addition, while the LTC includes its own mitigation proposals, these are not mapped as part of this study, which focuses on existing landscape features and opportunities.

Maps have been created to summarise the appraisal of each cluster, which identify the following spatial considerations and elements:

- Existing green and blue infrastructure and other key landscape features desirable to retain
- Extent and character of existing development and potential for integration
- Intervisibility with other development and existing landmarks
- Existing infrastructure
- Opportunities for new green and blue infrastructure

These maps are accompanied by a narrative which explains the conclusions of the appraisal for each cluster.

2.4 Nature-based solutions compendium

The UN defines Nature-based solutions (NbS) as “actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature”.

A compendium of potential NbS which could be applied to support sustainable development within the clusters are set out in Section 5: Part C, including illustrations and examples of existing applications.

This section explains the key attributes and outcomes of each NbS and considerations for policy, delivery and stewardship. It also indicates which NbS may be appropriate for each development scenario and where this could vary according to LCA and cluster. In most cases, several NbS may be appropriate.



SECTION 3

Part A - Landscape sensitivity assessment

3.1 LCA A1: Bulphan Fenland

This section sets out the results of the landscape sensitivity assessment of the LCAs scoped into the study.

3.1.1 Overview

The former fenland of the upper Mardyke is a low lying, intensively cultivated landscape contrasting with the adjacent, distinctive, wooded lower valley. Fields are subdivided by drainage ditches or hedgerows with a strong, geometric field pattern aligned on a north-south axis, probably of pre-Roman origin. Relict drainage features are evidence of the long history of land drainage and agricultural land reclamation.

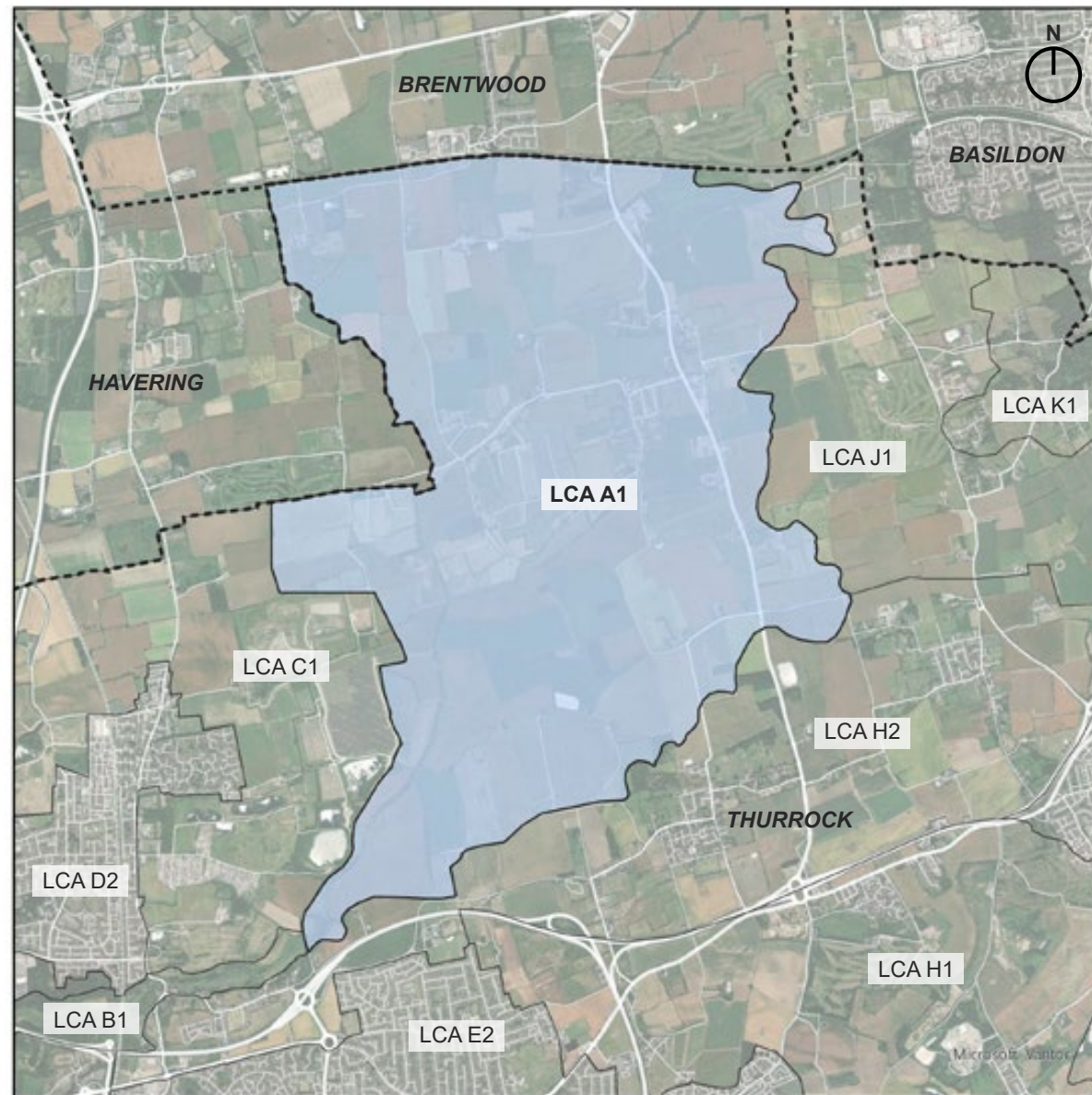


Figure 4: LCA A1: Bulphan Fenland

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.1.2 Landscape value

Table 7 sets out an assessment of the factors which contribute to the value attached to the landscape of LCA A1: Bulphan Fenland.

Table 7: LCA A1: Bulphan Fenland - Landscape value

FACTOR	EVIDENCE
Relevant designations	Thames Chase Community Forest
Natural heritage	- A handful of small patches of priority habitat: - Small patches of deciduous woodland - Small patch of coastal and floodplain grazing marsh - Moderate amount of multi-habitat area - Very small patch of traditional orchard - Few remaining areas of fenland
Cultural heritage	- No Scheduled Monuments - No Conservation Areas - Some areas of 18th-19th century enclosure and areas of Common, for example at Orsett Fen - A few moated houses are located within the village including Ye Olde Plough House Motel, formerly Garlesters and Appleton's Farm dating from the 15th century - St Mary the Virgin Church in Bulphan forms a local landmark - Relict drainage features are evidence of the long history of land drainage and agricultural land reclamation
Landscape condition	- Grade 3 agricultural land - Large-scale fields have been subject to considerable boundary loss, remnant field boundaries are broken and some are missing which weakens the field pattern - Landscape is generally intact due to the consistency of use as agricultural land - Built features are relatively well integrated, with trees softening the settlement edge to the wider landscape
Associations	Bulphan is recorded in the Domesday Survey as Bulgenen, which means marshland in a fortified place. 'Phan' relates to the word 'fan', which is the Saxon word for fen. The land at Bulphan was owned and farmed by the Abbey of Barking
Distinctiveness	- Low lying, intensively cultivated landscape - Fields are subdivided by drainage ditches or hedges with a strong, geometric field pattern aligned on a north-south axis, probably of pre-Roman origin; however, many field patterns have been lost to 20th century intensive farming - Some smaller rectilinear fields of pasture around Bulphan are more well-defined by field boundaries - Weak field pattern creates a sense of openness across the fenland - Isolated cottages and farmsteads in red brick or white rendered with clay tile roofs and weather-boarded barns; many recognised by listed status - Housing estate was built in the 1970s south of Bulphan Hall, substantially enlarging the population of the village - Further development to the north of the village occurred towards the end of the 20th century - Langdon Hill forms a distinctive wooded backdrop to the east whilst St Mary the Virgin Church forms a local landmark from in and around the village of Bulphan

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

FACTOR	EVIDENCE
Recreational	• Thames Chase Community Forest • Open Access Land at Orsett Fen • Existing network of recreational routes dissecting the landscape • The Mardyke River is also highlighted as an existing green corridor
Perceptual (Scenic)	• Open expanse of arable and pasture fields throughout the fenland allow for long-ranging views towards the conurbations of Thurrock • Well-wooded ridge running between Romford and Basildon provides a subtle but distinctive backdrop to views from this area • Long distance, panoramic views across the sparsely settled landscape including up to the wooded hills contributes to a relatively high scenic quality • The small number of urbanising features such as the Bulphan bypass is relatively well integrated into the landscape • Industrial chimneys and buildings provide vertical features in long-distance views across the area and from the edge of Bulphan. These are viewed in a largely rural context being situated on largely wooded skyline • Course of the Mardyke River with its wetland vegetation which provides visual interest and a green corridor comprising wetland habitats
Perceptual (wildness and tranquility)	• A mixture of arable and pasture farmland predominates with a few scattered coverts of deciduous trees • Tranquil, rural character and a feeling of remoteness with relatively dark skies; little human influence • The fenland has a strong sense of rurality and tranquillity as a result of the open and mostly undeveloped landscape • Long views to a well-wooded skyline create a feeling of remoteness • Sparse pattern of settlement that could be vulnerable to change if new development is proposed
Functional	• Predominantly mixed arable and pastoral fields • Existing network of recreational routes dissecting the landscape • The Mardyke River is also highlighted as an existing green corridor

There are no landscape designations that cover LCA A1: Bulphan Fenland. This LCA is an open landscape dominated by large fields, accommodating primarily intensive agriculture, both arable and pasture. Development is sparse, with several isolated farmsteads and a few small settlements of varying ages. The low level of development offers a degree of relative tranquillity, which is reduced in proximity to infrastructure. The landscape is flat, offering extensive rural views, which include urban and industrial development as well as wooded areas as backdrops. The LCA contains a few small areas of semi-natural habitat and recreational spaces, including fenland and wetlands.

The value attached to LCA A1: Bulphan Fenland is **medium**.

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.1.3 Susceptibility and sensitivity to change

Table 8 describes the susceptibility of the LCA to the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the approach described in Section 2.2.

Table 8: LCA A1: Bulphan Fenland - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open and rural character of this area (and its characteristic rural dispersed settlement pattern) means susceptibility to a very large housing area is very high. A new settlement of this size could take up a substantial part of the LCA and erode the relatively remote character of the area.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The open and rural character of this area (and its characteristic rural dispersed settlement pattern) means susceptibility to a very large housing area is very high. A new settlement of this size could take up a substantial part of the LCA and erode the relatively remote character of the area.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	High	The open and rural character of this area means that another settlement of this size would be a distinct new feature in the landscape, uncharacteristic of the existing area. Susceptibility to a substantial housing area is high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Medium	Development of this scale would not necessarily be a noticeable addition to the landscape due to existing patterns of development and the openness of the landscape. Susceptibility to a small housing area is medium.	Medium
Minor Housing (under 75 dwellings / under 2.5 ha)	Low	Development of this scale would not necessarily be a noticeable addition to the landscape due to existing patterns of development and the openness of the landscape. Susceptibility to a minor housing area is medium.	Medium
Flats (5-10 storeys in height)	Very high	The open and rural character and dispersed settlement pattern means that buildings of this scale would be a distinct new feature in the landscape. This area has a very high susceptibility to flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	Despite containing some industrial land use, the open and rural character and rural dispersed settlement pattern means this landscape has a very high susceptibility to major warehouse development of this scale.	High
Lorry parks (3.5-8 Ha)	Very high	Despite containing some industrial land use, the open and rural character and rural dispersed settlement pattern means this landscape has a very high susceptibility to lorry parks at this scale.	High

3.2 LCA B1: Lower Mardyke River Valley

3.2.1 Overview

LCA B1 is defined by the narrow valley of the Mardyke River, with wooded valley sides and an alluvial floodplain comprising riverside pasture alongside the watercourse, which meanders along the valley bottom. The valley has nature conservation interest and forms a natural break between the farmed and settled river terraces to the north and settled chalk ridge to the south. The valley is crossed by the A13 trunk road and M25, which detract from the sense of tranquillity.

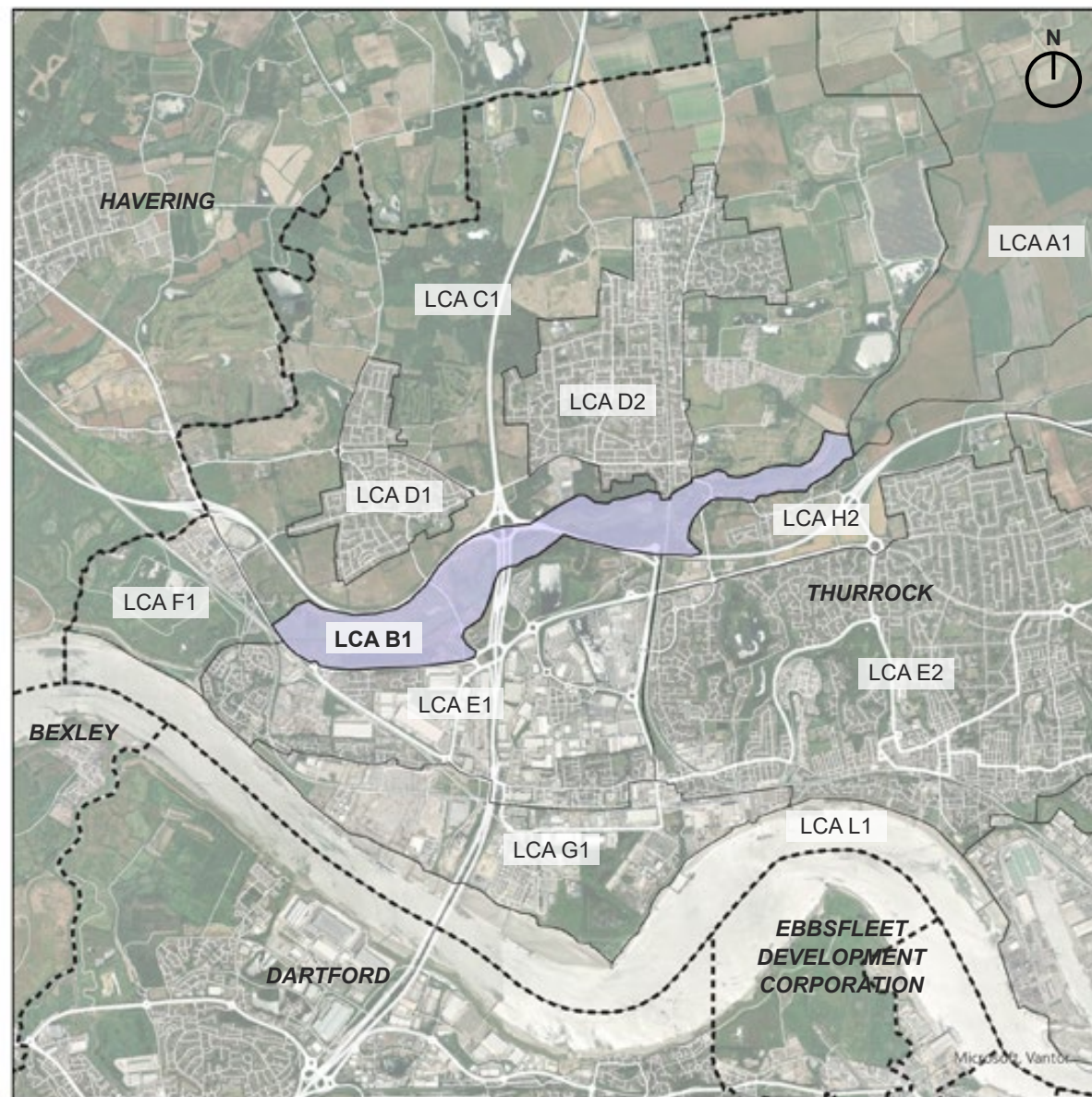


Figure 5: LCA B1: Lower Mardyke River Valley

Legend

- Local Planning Authority boundary
- Landscape Character Area boundary

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.2.2 Landscape value

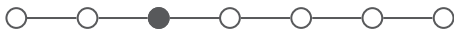
Table 9 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA B1: Lower Mardyke River Valley.

Table 9: LCA B1: Lower Mardyke River Valley - Landscape value

FACTOR	EVIDENCE
Relevant designations	- Thames Chase Community Forest - Substantial presence of Local Wildlife Sites
Natural heritage	- Most of the LCA is priority habitat: - Coastal and floodplain grazing marsh - Deciduous woodland; some woodland is ancient (e.g. Hangman's Wood, Brickbarn Wood and Watt's Wood) - Lowland wet grassland - Multi-habitat area - River valley is an important migratory route for birds heading to and from the marshes - Rare occurrence of extensive semi-natural habitat in close proximity to urban areas.
Cultural heritage	- No Scheduled Monuments - No Conservation Areas - Ancient system of valley bottom pastures with the valley sides characterised by a mixture of pasture in 18th and 19th century enclosures and woodland - Stifford Viaduct is a Victorian railway viaduct with 14 arches (opened in July 1892) - Historic bridge crossing points including a stone bridge at Stifford that dates back to the medieval period (first built in 1487)
Landscape condition	- Physical and ecological integrity - Grade 3 agricultural land along the valley bottom with some areas of better agricultural grade land on the sides and upper slopes - Relatively little change in land cover over the years, but some of the managed wetland was lost between the 18th and 19th century to enclosure which has since been turned to 20th century agriculture. Mineral extraction works on a small scale also took place before it was restored as 20th century agriculture
Associations	- Mardyke River used to be tidal up to Stifford until 1760 and was an historic communication corridor providing connections between the inland fen and the Thames - Stifford Pumping Station was built in 1926-27 to house large diesel engines which provided the power to extract water from a 42-metre-deep borehole in the chalk below. Water is still being extracted today using a modern electric pump

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

FACTOR	EVIDENCE
Distinctiveness	- Well-defined valley with wooded valley sides and an alluvial floodplain comprising riverside pasture alongside the Mardyke River which meanders along the valley bottom - Natural break between the farmed river terraces to the north and settled chalk ridge to the south - Naturalistic character, mostly undeveloped - Influence of local materials including red brick, white render, thatch and weatherboarding which provide a sense of place - A small caravan site, a small number of dwellings at Stifford Bridge, and a pumping station and a visitor centre at Davy Down - White rendered and thatched cottage with a weather boarded barn set amongst trees at Stifford Bridge (Grade II listed) in the valley bottom. Otherwise, materials are not in the local vernacular - the caravans are arranged in a small grid pattern and comprise prefabricated mobile homes, accessed from a single-track road off Ship Lane - Buildings within Davy Down comprise a brown brick pumping station with tall windows and distinctive arches as well as a visitor centre in similar materials.
Recreational	- Thames Chase Community Forest - Davy Down is a riverside park which provides opportunities for open air recreational and enjoyment of the valley landscape - Course of the Mardyke River is an important green corridor - Mardyke Way, opened in 2007 as part of the Thames Chase community forest, is a 11km footpath along the side of the Mardyke from Ship Lane, Aveley to Bulphan, passing through Davy Down riverside park - Proposed Aveley-Purfleet green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	- Pastoral riverside meadows, historic bridge crossing points and wooded slopes contribute to attractive views that can be experienced from vantage points on the valley sides and from elevated bridges over the valley - Valley tops have prominent, typically wooded, skylines although these are intruded upon by tall structures (such as chimneys and pylons) in adjacent areas, acting as visual detractors, as do the modern bridge crossings and associated lighting, signage and traffic - Arches of the Stifford Viaduct creates visual interest within the valley
Perceptual (wildness and tranquillity)	- Sense of rurality provides an escape from adjacent urban areas - Valley is crossed by major infrastructure, including a railway, the A13 and M25, which detracts from the sense of tranquillity - Wooded valley sides provide a sense of enclosure and seclusion from the adjacent built-up areas, but traffic noise and lighting on the crossings disrupt the sense of rural tranquillity
Functional	- Forms a green wedge almost entirely devoid of habitation between adjacent urban areas - Course of the Mardyke River is an important green corridor - Crossed by numerous major transport routes, including the M25 and the A13 trunk road.



SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

There are no landscape designations that cover LCA B1: Lower Mardyke River Valley. This LCA is almost entirely devoid of habitation but is strongly influenced by its proximity to urban development to the north and south and is crossed by several major transport routes. It comprises extensive semi-natural habitats, approximately half of which are designated priority habitat. It is mostly undeveloped and provides a sense of enclosure through its composition of habitats. It contains features of recreational value. There are few structures within the LCA and they are of a range of qualities; some have historical value. For these reasons, it is rare and its value is strongly linked to its function as a green wedge. Despite its enclosure and natural value, its tranquillity is substantially reduced by major infrastructure.

The value attached to LCA B1: Lower Mardyke River Valley is **high**.

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.2.3 Susceptibility and sensitivity to change

Table 10 describes the susceptibility of the LCA to the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 10: LCA B1: Lower Mardyke River Valley - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The undeveloped and rural character of this area means that another settlement of this size would be a distinct new feature in the landscape, uncharacteristic of the existing area. Susceptibility to a substantial housing area is very high.	Very high
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very high	The undeveloped and rural character of this area means that another settlement of this size would be a distinct new feature in the landscape, uncharacteristic of the existing area. Susceptibility to a small housing area is very high.	Very high
Minor Housing (under 75 dwellings / under 2.5 ha)	High	The undeveloped and rural character of this area means that any new housing in this generally unsettled area would be a notable addition to the landscape. Susceptibility to a minor housing area is high.	High
Flats (5-10 storeys in height)	Very high	The undeveloped, rural character and human scale of this area mean that buildings of this scale would be a distinct new feature in the landscape. This area has a very high susceptibility to flats.	Very high
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The undeveloped, rural character and human scale of this area mean this area has a very high susceptibility to major warehouse development.	Very high
Lorry parks (3.5-8 Ha)	Very high	The undeveloped, rural character and human scale mean this area has a very high susceptibility to lorry parks.	Very high

3.3 LCA C1: Belhus Farmed River Terrace Gravels

3.3.1 Overview

This area is a mixture of woodlands in the north-west of the area that extend outside of the borough into Havering, and extensive areas of mineral workings of clay, sand and gravel, some of which have been restored, as well as agricultural fields used for rough grazing, cereals and horticultural crops. It contains some areas of rural landscape and the well-wooded Belhus area forms a distinctive area within it.

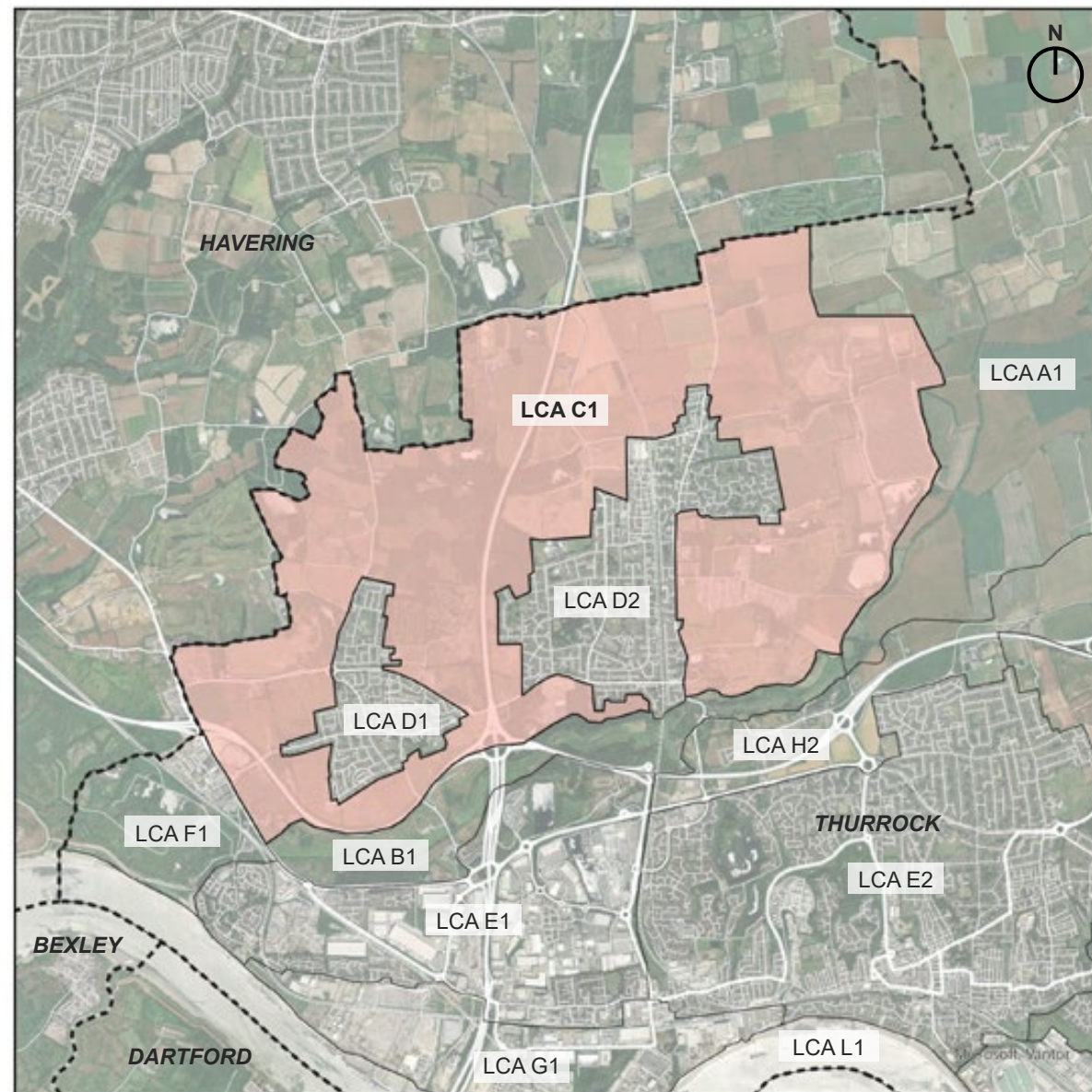


Figure 6: LCA C1: Belhus Farmed River Terrace Gravels

3.3.2 Landscape value

Table 11 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA C1: Belhus Farmed River Terrace Gravels.

Table 11: LCA C1: Belhus Farmed River Terrace Gravels - Landscape value

FACTOR	EVIDENCE
Relevant designations	- Local Wildlife Sites - Thames Chase Community Forest - Purfleet Road, Aveley SSSI
Natural heritage	- Woodland in Belhus Park, Belhus Woods Country Park, Belhus Chase: oak and ash plantations with London Planes of interest and ancient coppice woodland - Blocks of woodland adjacent to the southern edge of South Ockendon, such as Hangman’s Wood, Brannett’s Wood and Oak Wood providing habitat - Restored mineral workings including lakes have biodiversity interest, but poorly restored landscapes with young, scrubby planting, partly restored landscapes including lakes, and active landfill sites - Grangewaters Outdoor Education Centre - Kennington Park - Belhus Lakes Wildlife Site for example, have a population of Little Ringed Plover, a rare breeding bird in Essex and good developing reed beds and a marginal vegetation and fringed by wet woodland of wet willow, alder and waterlily in the open water - Watercourses including Running Water Brook and lakes (the result of restored gravel pits) which are valued for their ability to support wildlife habitats
Cultural heritage	- Belhus Park Registered Park & Garden - Rich in archaeological finds and potential archaeology, buried in Ice Age deposits tunnelled into the London Clay – site of the famous ‘Aveley Elephants’ - Very small pockets of pre-18th century enclosure which is very rare in this part of Essex - Scheduled Monument at South Ockendon Hall, marking Roman earthen barrows and a Scheduled Monument marking the gatehouse and moat of South Ockendon Old Hall
Landscape condition	- Land cover has been relatively highly modified due to human activity Most of the fields have been replaced by post 1950s boundary loss - Visual intrusion of the adjacent urban edges of Aveley and South Ockendon, with buildings often dominating the skyline within the open landscape and residential and industrial development poorly integrated into the landscape with abrupt straight edges of uniform housing - Agricultural areas have some gappy hedgerows and there are poorly maintained areas of land and public footpaths - Previous extraction of sand, gravel and clays has left a detrimental legacy on this landscape – fencing, signage, concrete block barriers, erosion of rural lanes, fly tipping and extensive areas of active landfilling - Area around Belhus is more intact with well-maintained footpaths, signage, well-managed hedgerows and woodland

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FACTOR	EVIDENCE
Associations	• Site of the famous ‘Aveley Elephants’: remains of a woolly mammoth dated around 200,000 years ago and the Straight Tusked Elephant were discovered in Ice Age deposits tunnelled into the London Clay. The pit has since been infilled and is now a landfill site • Extraction of gravel, chalk and clay was a key industry from the 17th century in and around Aveley • Landscape contains a number of parkland remnants from Anglo-Saxon and Medieval manors. These were subsequently developed into country houses with landscaped grounds in the 17th and 18th centuries • Belhus Park includes 19th century parkland and some 18th century remnants of the Capability Brown designed landscape • Saxon place names relating to low lying marshy land, including ‘Fanns Farm’ in the southwest of the area, (‘fann’ meant ‘low marshy land’). Saxon names include Ockendon and Stifford
Distinctiveness	• Low lying, intensively cultivated landscape • Fields are subdivided by drainage ditches or hedges with a strong, geometric field pattern aligned on a north-south axis, probably of pre-Roman origin; however many field patterns have been lost to 20th century intensive farming • Some smaller rectilinear fields of pasture around Bulphan are more well-defined by field boundaries • Weak field pattern creates a sense of openness across the fenland • Isolated cottages and farmsteads in red brick or white rendered with clay tile roofs and weather-boarded barns; many recognised by listed status • Housing estate was built in the 1970s south of Bulphan Hall, substantially enlarging the population of the village. • Further development to the north of the village occurred towards the end of the 20th century • Langdon Hill forms a distinctive wooded backdrop to the east whilst St Mary the Virgin Church forms a local landmark from in and around the village of Bulphan.
Associations	• Site of the famous ‘Aveley Elephants’: remains of a woolly mammoth dated around 200,000 years ago and the Straight Tusked Elephant were discovered in Ice Age deposits tunnelled into the London Clay. The pit has since been infilled and is now a landfill site • Extraction of gravel, chalk and clay was a key industry from the 17th century in and around Aveley • Landscape contains a number of parkland remnants from Anglo-Saxon and Medieval manors. These were subsequently developed into country houses with landscaped grounds in the 17th and 18th centuries • Belhus Park includes 19th century parkland and some 18th century remnants of the Capability Brown designed landscape • Saxon place names relating to low lying marshy land, including ‘Fanns Farm’ in the southwest of the area, (‘fann’ meant ‘low marshy land’). Saxon names include Ockendon and Stifford
Distinctiveness	• Fragmented character with a sense of intrusion from mineral extraction sites, landfill and infrastructure • Mixture of woodlands in the north-west, extensive areas of mineral workings of clay, sand and gravel (some restored) and agricultural fields used for rough grazing, cereals and horticultural crops • Some areas of rural landscape; very little settlement within the LCA • Well-wooded Belhus area forms a distinctive area within it • Concentration of lakes created by former quarry sites and clay pits and narrow stream valleys such as Running Water Brook • Individual farmsteads and barns of locally sourced red brick, many of them historic. Listed manors, some of which developed into country houses with landscaped parks in the 17th and 18th centuries • Travelling Show people’s site at Buckles Lane • Timber-framed, weather boarded and plastered houses of two storeys are typical of the local vernacular • Skylines are not distinctive within the LCA

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FACTOR	EVIDENCE
Recreational	• Thames Chase Community Forest: substantial amount of open space – particularly woodlands and parklands which play an important function for recreation for the local communities and setting to the adjacent settlements of Aveley and South Ockendon. • Belhus Woods Country Park • Belhus Park Registered Park & Garden • Restored mineral workings including lakes as recreational assets • Grangewaters Outdoor Recreation Centre • Kennington Park • Proposed Aveley-Purfleet green link, from the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) map

There are no landscape designations that cover LCA C1: Belhus Farmed River Terrace Gravels. The LCA is fragmented, consisting of a mixture of arable land and pasture, old mineral extraction sites that are often poorly restored, and woodland of mixed quality. Generally, the area acts as a feature of recreational value for the settlements of Aveley and South Ockendon owing to its variety of typologies and habitats. It is mostly undeveloped, but its rural tranquillity is compromised by nearby and transecting infrastructure and industry.

The value attached to LCA C1: Belhus Farmed River Terrace Gravels is **medium**.

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3.3.3 Susceptibility and sensitivity to change

Table 12 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 12: LCA C1: Belhus Farmed River Terrace Gravels - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The rural character and relatively small size of this area means susceptibility to a very large housing area is very high. A new settlement of this size could take up a substantial part of the LCA and erode the rural character of the area.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	High	The rural character and relatively small size of this area means that another settlement of this size would be a notable and distinct introduction to the landscape, taking up a substantial portion of the area. Susceptibility to a large housing area is high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	High	The rural character and relatively small size of this area means that another settlement of this size would be a notable and distinct introduction to the landscape, taking up a substantial portion of the area. Susceptibility to a substantial housing area is high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Medium	Although the rural character of this area increases susceptibility, the disturbed and remodelled nature of the land, its human interference and presence of potentially screening woodland reduce susceptibility. Overall, susceptibility to a small housing area is medium. Another settlement of this size would be a notable introduction to the landscape as it would take up a substantial portion of the area.	Medium
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	Although the rural character of this area increases susceptibility, the disturbed and remodelled nature of the land, its human interference and presence of potentially screening woodland reduce susceptibility. Overall, susceptibility to a minor housing area is medium.	Medium
Flats (5-10 storeys in height)	Very high	The rural and undeveloped character of this area means that the introduction of buildings of this scale would result in a marked difference from existing development and its surroundings. The area has a very high susceptibility to any flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The relative sense of rurality (compared to other parts of Thurrock) means this area has a very high susceptibility to major warehouse development. The southern boundary with the Mardyke River valley and Belhus Park sub-area is particularly susceptible.	High
Lorry parks (3.5-8 Ha)	Very high	Although this is a relatively flat landscape with disturbed land that may provide some opportunities for screening of ground level features, the relative sense of rurality increases susceptibility – particularly to uses that include many vehicle movements and floodlights. The area has very high susceptibility to lorry parks.	High

3.4 LCA D1: Aveley

3.4.1 Overview

Aveley is a largely post-war settlement that grew from a medieval settlement. Predominantly residential in character, access and glimpsed views to its surrounding landscape (of LCA C1: Belhus Farmed River Terrace Gravels) and natural open spaces within the town provide a welcome relief to a sometimes ‘hard’ townscape environment.

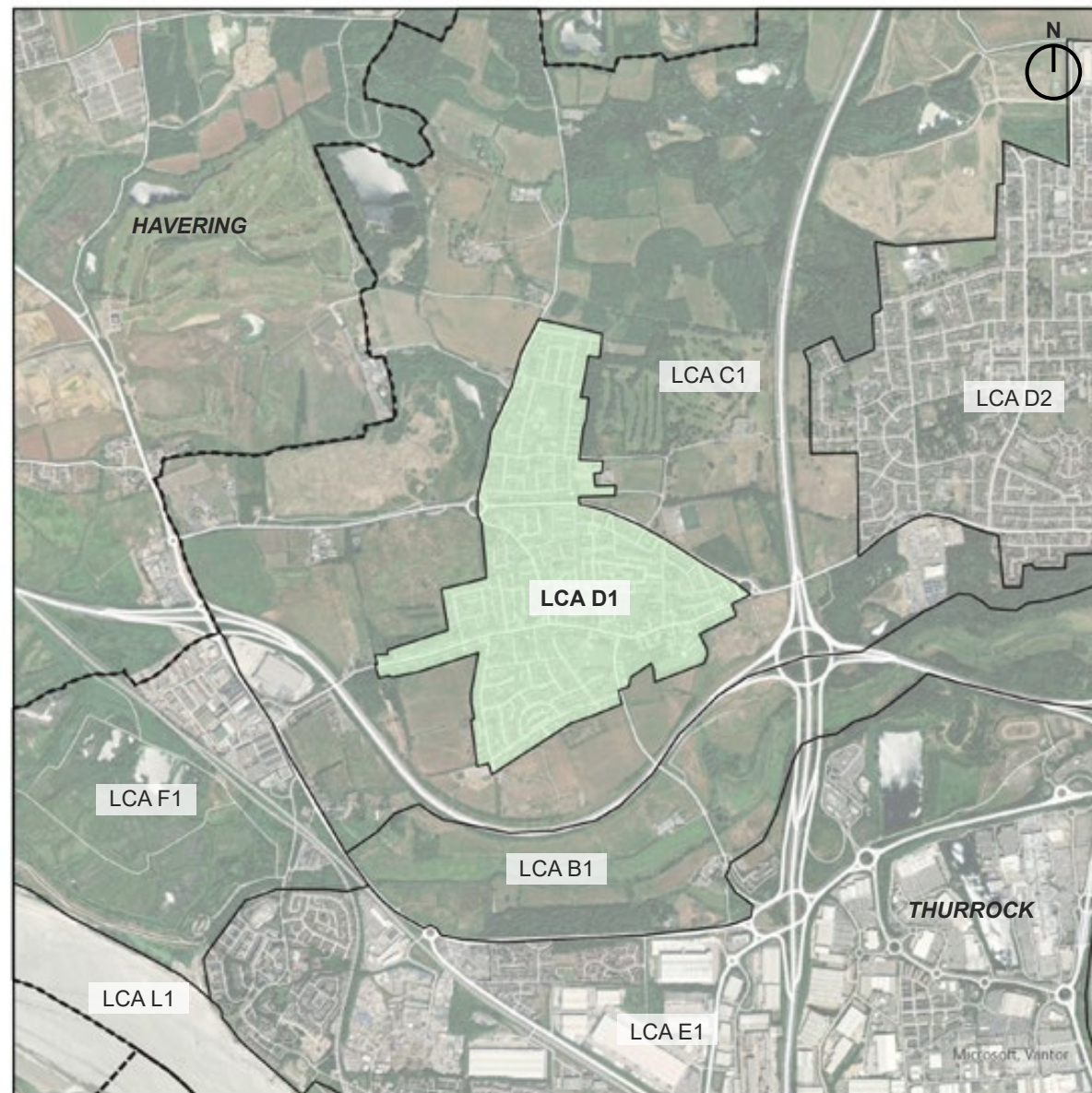


Figure 7: LCA D1: Aveley

Legend

- Local Planning Authority boundary
- Landscape Character Area boundary

3.4.2 Landscape value

Table 13 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA D1: Aveley.

Table 13: LCA D1: Aveley - Landscape value

FACTOR	EVIDENCE
Relevant designations	Thames Chase Community Forest
Natural heritage	Smaller interstitial open spaces between buildings contain amenity grassland and occasionally mature trees such as London Planes, Willows or Oak
Cultural heritage	- St Michael’s Church - an attractive stone-built Grade I listed building. The churchyard is a peaceful open space with high quality natural character, seen with the popular Maltings Recreation Ground behind. - Scheduled Monument marks the site of a moated manor house which stood southeast of the church which, in 1374 was a substantial house with a deer park.
Landscape condition	- Generally, relatively poor townscape quality - There has been a decline in the condition of the historic core as well as other parts of the settlement
Associations	No known associations
Distinctiveness	- Post-war settlement that grew from a medieval settlement - Predominantly residential in character, access and glimpsed views to its surrounding landscape - Natural open spaces within the town provide a welcome relief to a sometimes ‘hard’ townscape environment - Weak sense of place due to standardised suburban post-war housing and utilitarian streetscape - Green setting, as a result of Belhus Park and Belhus Country Park to the north and the Mardyke River valley to the south (outside LCA) - Sense of history in individual features Aveley’s medieval historic core at High Street with some historic buildings including St Michael’s Church and 16th to 18th century houses typically timber-framed and plastered, providing visual interest - Landscape setting to the west has less of a positive influence on character because there are fewer features of landscape interest - Predominantly post-war suburban housing, a mixture of semi-detached and detached houses set around crescents and cul-de-sacs. Some post-1960s housing estates around Rowan Grove characterised by red or beige brickwork

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FACTOR	EVIDENCE
Recreational	• Green open spaces provide a welcome focus for wildlife or recreation • Open spaces include allotment gardens to the south of Hall Road, the recreation ground at the Maltings and sport ground (Mill Field) • Attractive accessible countryside on the doorstep e.g. Belhus Woods Country Park, the Mardyke River valley, Kennington Park and Grangewaters Outdoor Education Centre • Proposed Aveley-Purfleet green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	• Some historic buildings including St Michael's Church and 16th to 18th century houses typically timber-framed and plastered, providing visual interest • Views to the green open spaces around the settlement, such as views to Kennington Park, Usk Road Park, Belhus woodland and across the Mardyke valley, are an important element that provide a sense of place • The open, undeveloped character of the landscape south of Stifford Road which adjoins the Mardyke River valley and the views towards Hangman's Wood by South Ockendon • Buildings and public realm are in need of regeneration, and large areas of hard surface limit its visual interest • Views south from the south of Aveley (e.g. along north-south orientated residential streets such as Hall Avenue, and at junctions with these streets on Purfleet Road) to the power station landmark, QE2 Bridge and industry around Purfleet provides interest and a sense of place although pylons are detracting features • Occasional views to the green space to the south including the area around the Mardyke River valley • Glimpsed views along residential streets around the edges of the town to nearby open spaces provide important sense of place and character. E.g. views to Kennington Park and Usk Road Park from the northern edges of Aveley and from the Rowan Grove area; views east to Belhus woodland
Perceptual (wildness and tranquility)	• Major roads – particularly the B1335 Aveley Bypass and the A13 south of the settlement – provide major physical and visual barriers to movement • High Street has a busy character, largely as a result of traffic. The churchyard at St Michael's has a natural, peaceful character • Vehicles are overly dominant as a result of uncontrolled parking on verges and other pieces of land, which in combination with clutter in the public realm (signs, different surface treatments, pedestrian guard rails etc.) gives a sense of discordance
Functional	• Primarily residential

There are no landscape designations that cover LCA D1: Aveley. This LCA comprises the entirety of the Aveley, which is predominantly a post-war settlement. There are a few, small open spaces in the settlement, which provide recreational value. Major roads disrupt the character of the settlement. The relatively dense townscape limits views to the landscape surrounding the LCA.

The value attached to LCA D1: Aveley is **low**.

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3.4.3 Susceptibility and sensitivity to change

Table 14 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 14: LCA D1: Aveley - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Medium	New development of this size could require taking up a large proportion of open space, affecting the character of the area. Given the density and type of existing development, new additions may not lead to undue consequences for the area. Susceptibility to a substantial housing area is medium.	Medium
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Low	The urban and residential nature of this character area and its relatively poor townscape quality reduces susceptibility to new housing developments (or redevelopments) of this scale within the urban area. Overall, this character area has low susceptibility to this scale of development, although the historic core around St Michael's Church has higher susceptibility due to the historic features that would need to be conserved.	Low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The urban and residential nature of this character area and its relatively poor townscape quality reduces susceptibility to new housing developments (or redevelopments) of this scale within the urban area. Overall, this character area has very low susceptibility to this scale of development, although the historic core around St Michael's Church has higher susceptibility.	Very low
Flats (5-10 storeys in height)	Medium	Although the urban and residential nature of this character area reduces susceptibility to flats, the generally low height of development and the rural location of this settlement increase susceptibility, particularly to higher or larger blocks. Overall, this character area has medium susceptibility to flats. The historic core and rural settlement edges have higher susceptibility.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The residential and human scale of the settlement result in a very high susceptibility to large-scale buildings of this nature.	Medium
Lorry parks (3.5-8 Ha)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A

3.5 LCA D2: South Ockendon

3.5.1 Overview

This LCA consists of a post-war urban expansion community centred on a historic hamlet between the upper Mardyke River and the historic landscape of Belhus Park.

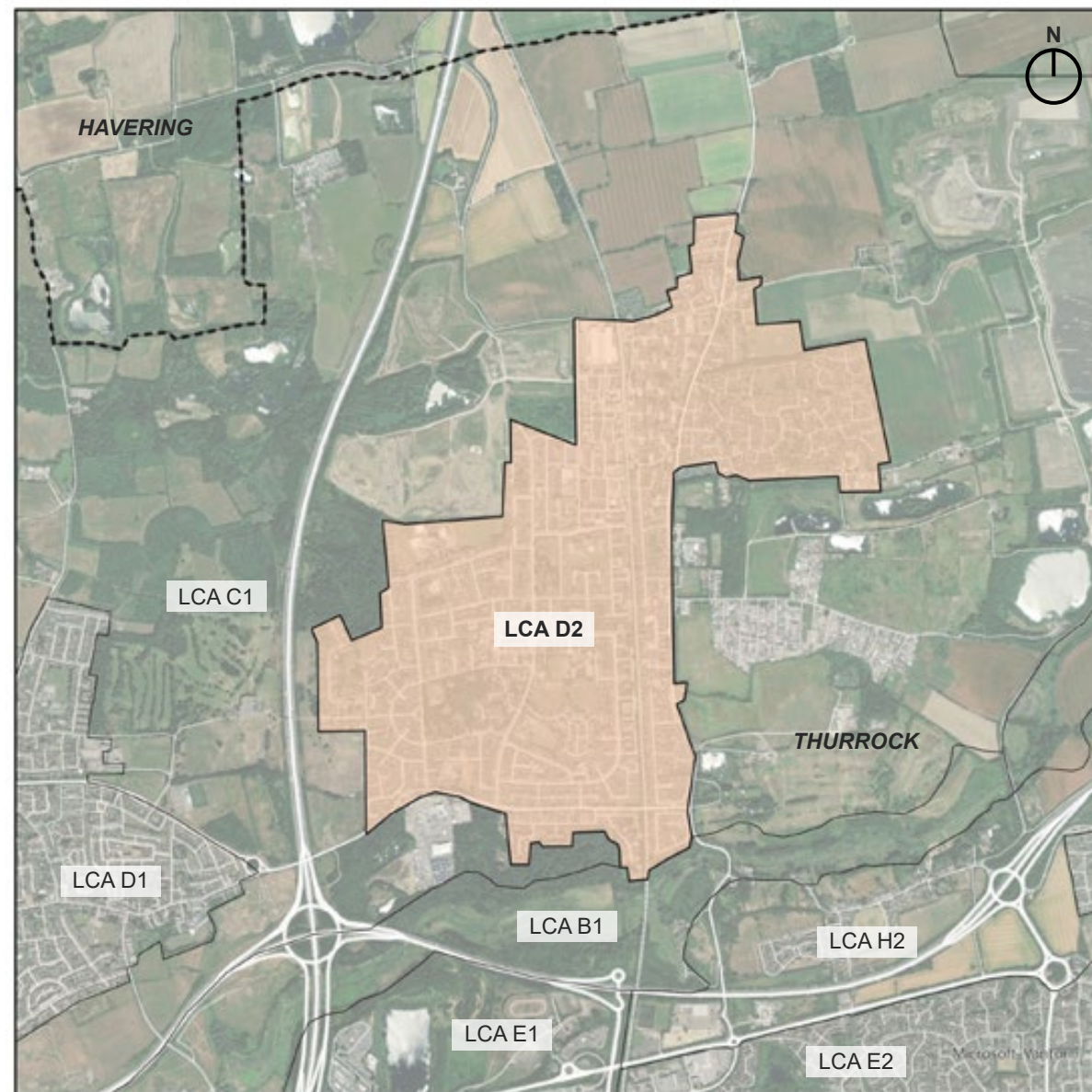


Figure 8: LCA D2: South Ockendon

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3.5.2 Landscape value

Table 15 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA D2: South Ockendon.

Table 15: LCA D2: South Ockendon - Landscape value

FACTOR	EVIDENCE
Relevant designations	- Thames Chase Community Forest - South Ockendon Church Local Wildlife Site
Natural heritage	- Little Dilkes Wood is a remnant of ancient woodland (formerly part of a larger ancient wood on the site of the park), and adjacent is Dilkes Park, consisting of amenity grassland and several veteran trees - South Ockendon Church in the northeast of the village is a designated Local Wildlife Site with ancient grassland, of particular interest for rare plants such as Subterranean Clover - Attractive countryside on the doorstep e.g. Belhus Woods Country Park, the Mardyke River valley and Grangewaters Outdoor Recreation Centre (not in LCA D2) - Fragments of the former parkland remain in the form of Oak Wood and Ash Plantation between the urban edge and the M25
Cultural heritage	1940s 'prefab' houses to accommodate bombed-out residents of East London and West Essex, reported as having been built by Prisoners of War - St. Michael's Church which lends a strong sense of place, diversity of building style and a sense of time depth
Landscape condition	- To the south, former mineral workings have left a legacy of derelict land used as rough grazing and to the east the Grange Farm landfill site dominates - Building facades and public realm of mixed quality and generally in poor condition create a perception of neglect
Associations	South Ockendon is mentioned in the Domesday Book as Wokenduna
Distinctiveness	- Dominance of post-war housing estates and utilitarian streetscape with little sense of place but interspersed with some high-quality open spaces such as Dilkes Park 1940s 'prefab' houses to accommodate bombed-out residents of East London and West Essex, reported as having been built by Prisoners of War - South Ockendon's historic core centred on the village green which, along with St Nicholas Church, the Royal Oak, the war memorial and historic buildings, has a strong sense of place and history - The distinctive round towered church of St Nicholas (the only one remaining in Thurrock) forms a distinctive landmark - Open green spaces are well integrated into the settlement and with adjacent buildings – such as at the Green - Interesting architectural forms provide some variety, such as chimneys and mono-pitched roofs (such as the building near the Royal Mail centre at Derwent Parade) - Weak character and sense of place within residential areas with monotonous character and a lack of variety in heights meaning that it is often difficult to orientate oneself - Ockendon Green, which is valued for its historic character and strong sense of place, enforced by the presence of historic elements such as the war memorial, St Nicholas Church and the Royal Oak Inn which help to create a distinctive node
Recreational	Open green spaces are well integrated into the settlement and with adjacent buildings – such as at the Green

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FACTOR	EVIDENCE
Perceptual (Scenic)	• Attractive views across the village green to the church and other historic buildings • Character of views is often monotonous and dominated by 'hard' landscape and parking • Little of visual interest because so many buildings are the same height and square shape
Perceptual (wildness and tranquility)	• Busy and noisy North Road (B186) corridor. Derwent Parade and North Road around the Village Green are busy hubs with pedestrian and vehicle activity. Vehicles are a notable presence, with unmanaged parking on verges and small pieces of land, giving the impression of discordance and clutter
Functional	• Residential

There are no landscape designations that cover LCA D2: South Ockendon. This LCA comprises the entirety of the settlement of South Ockendon, which is predominantly a post-war settlement built around an older, historic core. It contains a few green spaces, including a Local Wildlife Site, which contains ancient trees and grassland. The built environment does not generally provide any visual interest and is disrupted by cars and several busy roads.

The value attached to LCA D2: South Ockendon is **low**.

3.5.3 Susceptibility and sensitivity to change

Table 16 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 16: LCA D2: South Ockendon - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Medium	New development of this size could require taking up a large proportion of open space, affecting the character of the area. Given the density and type of existing development, new additions may not lead to undue consequences for the area. Susceptibility to a substantial housing area is medium.	Medium
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Low	The urban and residential nature of this character area and its relatively poor townscape quality reduces susceptibility to new housing developments (or redevelopments) of this scale within the urban area. Overall, this character area has low susceptibility to this type of development, although the historic core around the village green and church has higher susceptibility due to its historic features that would need to be conserved.	Low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The urban and residential nature of this character area and its relatively poor townscape quality reduce susceptibility to new housing developments (or redevelopments) of this scale within the urban area. Overall, this character area has very low susceptibility to this scale of development, although the historic core around the village green and church has higher susceptibility due to the historic features that would need to be conserved.	Very low
Flats (5-10 storeys in height)	Medium	Although the urban and residential nature of this character area reduces susceptibility to flats, the generally low height of development and rural location of this settlement increase susceptibility, particularly to higher or larger blocks. Overall, this character area has medium susceptibility to flats. The scarp top, historic core and rural edges has higher susceptibility.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The residential and human scale of the settlement result in very high susceptibility to large-scale buildings of this nature.	Medium
Lorry parks (3.5-8 Ha)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A

3.6 LCA E1: West Thurrock, Lakeside & Purfleet

3.6.1 Overview

This is an urban area whose character is greatly influenced by quarrying and industrial development. Large-scale road and rail corridors, commercial / industrial developments and large retail buildings of Lakeside Retail Park dominate the character of the area. Residential areas in West Thurrock and Purfleet sit amongst large-scale industrial buildings, with some historical buildings and pockets of natural open spaces providing localised character.

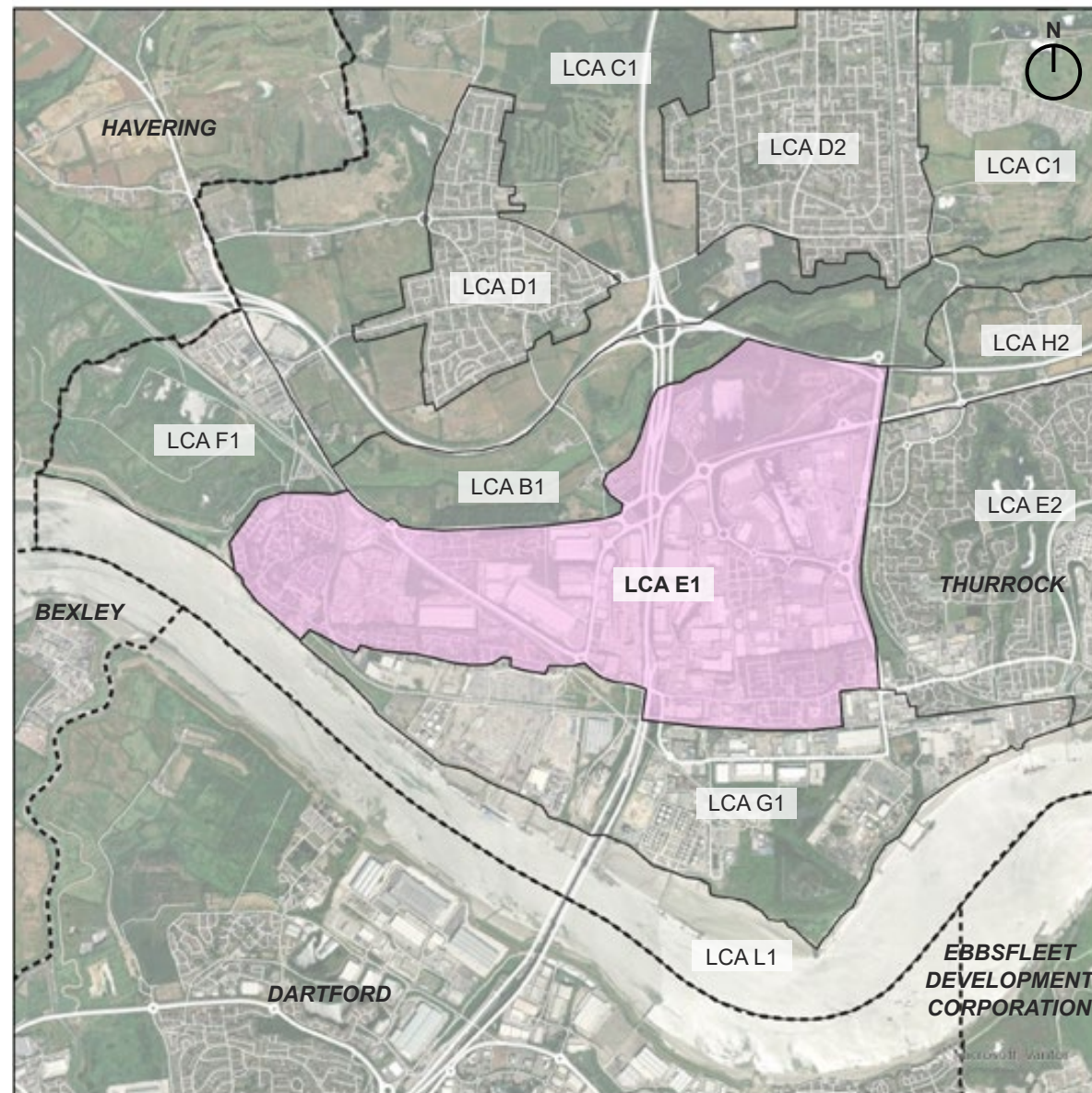


Figure 9: LCA E1: West Thurrock, Lakeside & Purfleet

Legend

- Local Planning Authority boundary
- Landscape Character Area boundary

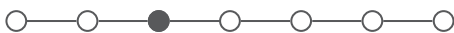
SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.6.2 Landscape value

Table 17 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA E1: West Thurrock Lakeside & Purfleet.

Table 17: LCA E1: West Thurrock, Lakeside & Purfleet - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Purfleet Chalk Pits SSSI • Local Wildlife Sites • Thames Chase Community Forest
Natural heritage	• Some priority habitat: deciduous woodland, coastal and floodplain grazing marsh, multi-habitat area • Small strips of deciduous woodland, mudflats along the coastal edge at Purfleet and outcrops of calcareous grassland flora amongst the urban fabric provide biodiversity interest • Ecological value is contained to small areas of deciduous woodland, many of which are recognised as Local Wildlife Sites and part of Watt’s Wood ancient woodland • Chalk exposures reveal river terrace deposits overlying the chalk, providing information on the evolution of the Thames and Northern European interglacial sequences (e.g. Purfleet Chalk Pit SSSI) • Lakes within former chalk pits include the large lake at Lakeside • Arena Essex is designated a Local Wildlife Site for the rare plant Broad-leaved Cudweed found there
Cultural heritage	• Purfleet Core Conservation Area • Pockets of history dotted amongst the urban fabric such as High House in West Thurrock • Strong sense of place in Purfleet with historic connections to the Thames, remnants of a planned village and Proof House built by the Whitbread family in the 18th century and the remaining gunpowder magazine • Many buildings of historic interest in Purfleet, mainly focussed in the Conservation Area, and many of them listed • Area has an interesting history, although much of it is currently hidden by industrial development and infrastructure • Archaeological evidence has been uncovered throughout the area including several Romano-British burials dating back nearly 1700 years at High House, Purfleet • Large amount of Palaeolithic material has been found • The Dovecote at High House which is a Scheduled Monument • Potential for archaeological remains in unquarried and undeveloped areas, increasing sensitivity to development
Landscape condition	• Mixture of land uses of transport infrastructure, commercial/ industrial developments, retail (including Lakeside Retail Park) and residential, create a fragmented environment • Public realm is often in poor condition, with uncoordinated furniture and materials, little planting to soften built facades, and streetscapes have poor legibility as a result of clutter of street furniture, signposts and fencing marking the boundaries of adjacent land uses
Associations	• Associated with the setting for Bram Stoker’s novel ‘The Dracula Story’, a location for the storage of gunpowder from the mid-1700s and artist J.M.W. Turner who made sketches of Purfleet in 1805-08 mainly featuring the Purfleet Royal Powder Magazines



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FACTOR	EVIDENCE
Distinctiveness	• Character is greatly influenced by quarrying and industrial development • Large-scale road and rail corridors, commercial/ industrial developments and large retail buildings of Lakeside Retail Park dominate • Residential areas in West Thurrock and Purfleet sit amongst large-scale industrial buildings, with some historical buildings and pockets of natural open spaces providing localised character • Mixture of land uses of transport infrastructure, commercial/ industrial developments, retail (including Lakeside Retail Park) and residential, create a fragmented environment • Western end of Purfleet retains a distinct nucleated form around a historic core with the edges strongly defined by the Mardyke River river to the north and west, the River Thames to the south and the railway line to the east • Mixture of ages, styles and materials creates interest and character to the area • Overall, the area has a weak sense of place, as industrial buildings and standardised modern buildings and public realm dominate, with few locally distinctive • Elements of local distinctiveness such as the chalk quarry faces which are locally recognisable and indicate the underlying geology. The historic part of Purfleet where historic buildings – including the historic Purfleet Garrison - and relationship to the river, has a strong sense of place areas or landmarks visible • General lack of clear urban structure means the area lacks legibility and distinction, particularly between the areas of Purfleet, West Thurrock and Lakeside
Recreational	• Green spaces are dotted within the urban fabric, providing space between areas of built development. These are mostly small areas of amenity grassland with occasional trees and planting around residential developments • Small pockets of amenity open space including 'Riverside Green' in Purfleet (the Purfleet Heritage Centre & Park), small recreation grounds and a memorial ground and cemetery in West Thurrock • Poor pedestrian connectivity between the places within this area and between these places and those outside such as the River Thames to the south and Chafford Hundred / Grays to the east • Green spaces are lacking, with the exception of the Purfleet Core area • Riverside Park area in Purfleet Core that is a valuable recreation resource for the local community, providing a strong sense of place adjacent to the River Thames
Perceptual (Scenic)	• Some long distance, panoramic views from higher areas to the Thames, the QEII bridge and along the Thames corridor to London • Thames to the south provides a relatively strong landscape setting • Often juxtapositions of large commercial buildings next to small scale residential houses creating a stark contrast in scale • Many visual detractors including industrial buildings, retail buildings, major transport infrastructure • Some features of visual interest including the historic buildings (including garrison buildings at Purfleet), areas of woodland and exposed chalk faces and views to the Thames from Riverside Park in Purfleet and pylons • Views from higher points across the West Thurrock Marsh to the Thames
Perceptual (wildness and tranquility)	• Road corridors (including the M25, A1090 and A1306 • Lakeside Retail Park is a large area of retail land use in the northeast of the area. The Thurrock Service Station on the M25 lies to the north of the A1306 and there is a large motorsports complex at Arena Essex • Busy, active and generally noisy as a result of transport corridors and industrial works within the area and in the industrial areas outside the area to the south • Riverside Park at Purfleet provides a sense of openness and expansiveness with wide reaching views along the Thames
Functional	• Mixture of land uses of transport infrastructure, commercial/ industrial developments, retail (including Lakeside Retail Park) and residential

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There are no landscape designations that cover LCA E1: West Thurrock, Lakeside & Purfleet. This LCA comprises a mix of land uses, including transport, commercial / industrial developments, retail and residential. This results in a fragmented LCA with no distinct sense of place, although certain pockets of cohesive townscape and landscape exist. There is a lack of pedestrian connectivity across the area, and the public realm does not offer much in the way of visual interest. The LCA contains some natural features, including a range of habitats, recognised by one SSSI and several Local Wildlife Site designations; some ancient woodland can be found. Despite this, green spaces are not considered in abundance or in particularly good condition. The LCA offers some archaeological potential and historical value. There are several important transport corridors, which together with large-scale commercial and industrial development disrupt any sense of tranquillity.

The value attached to LCA E1: West Thurrock, Lakeside & Purfleet is **low**.

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3.6.3 Susceptibility and sensitivity to change

Table 18 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 18: LCA E1: West Thurrock, Lakeside & Purfleet - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	Low	A new urban area of this size would require substantial redevelopment of this area. The urban nature of the area and lack of sense of place currently reduce susceptibility to a redevelopment scheme – in fact redevelopment could create opportunities to improve the character and sense of place. The historic areas is more susceptible to change, and design would have to preserve the historic character of these areas. Overall, the area has a low susceptibility to urban development of this scale.	Low
Substantial housing arewa (300 to 999 dwellings / 11 to 33 Ha)	Low	The urban nature of the area and lack of sense of place currently reduces susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve the character and sense of place. The historic areas are more susceptible to change and design would have to preserve the historic character of these areas. Overall, the area has low susceptibility to urban development of this scale.	Low
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very low	The urban nature of the area and lack of sense of place currently reduces susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve the character and sense of place. The historic areas are more susceptible to change and design would have to preserve the historic character of these areas. Overall, the area has very low susceptibility to urban development of this scale. Any development should preserve and aim to extend greenspace and use locally-occurring species to reflect the underlying geology which should give this area its sense of place.	Very low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The urban nature of the area and lack of sense of place currently reduce susceptibility to a redevelopment scheme of this size. The historic areas are more susceptible to change, and design would have to preserve the historic character of these areas. Overall, the area has very low susceptibility to urban development of this scale.	Very low

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DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Flats (5-10 storeys in height)	Medium	Although the urban nature of this character area reduces susceptibility to flats, the ridgeline character increases susceptibility. Overall, this character area has medium susceptibility to flats. Such developments would be best incorporated into urban centres and away from skylines that are prominent in views from the adjacent lowlands (e.g. at the edge of the ridge). Historic cores and rural edges have higher susceptibility.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Medium	This area contains large areas devoted to large-scale economic / industrial activity; the addition of this type of development may not result in a notable change depending on location. Susceptibility to this type of development is medium.	Medium
Lorry parks (3.5-8 Ha)	Medium	This area contains large areas devoted to large-scale economic / industrial activity; the addition of this type of development may not result in a notable change depending on location. Susceptibility to this type of development is medium.	Medium

3.7 LCA E2: Grays, Chafford Hundred & South Stifford

3.7.1 Overview

This is a large conurbation of the town of Grays and the adjacent urban areas of Chafford Hundred and South Stifford. The southern edge of Grays is located adjacent to the Thames and the area as a whole has undergone rapid expansion in the 20th century.

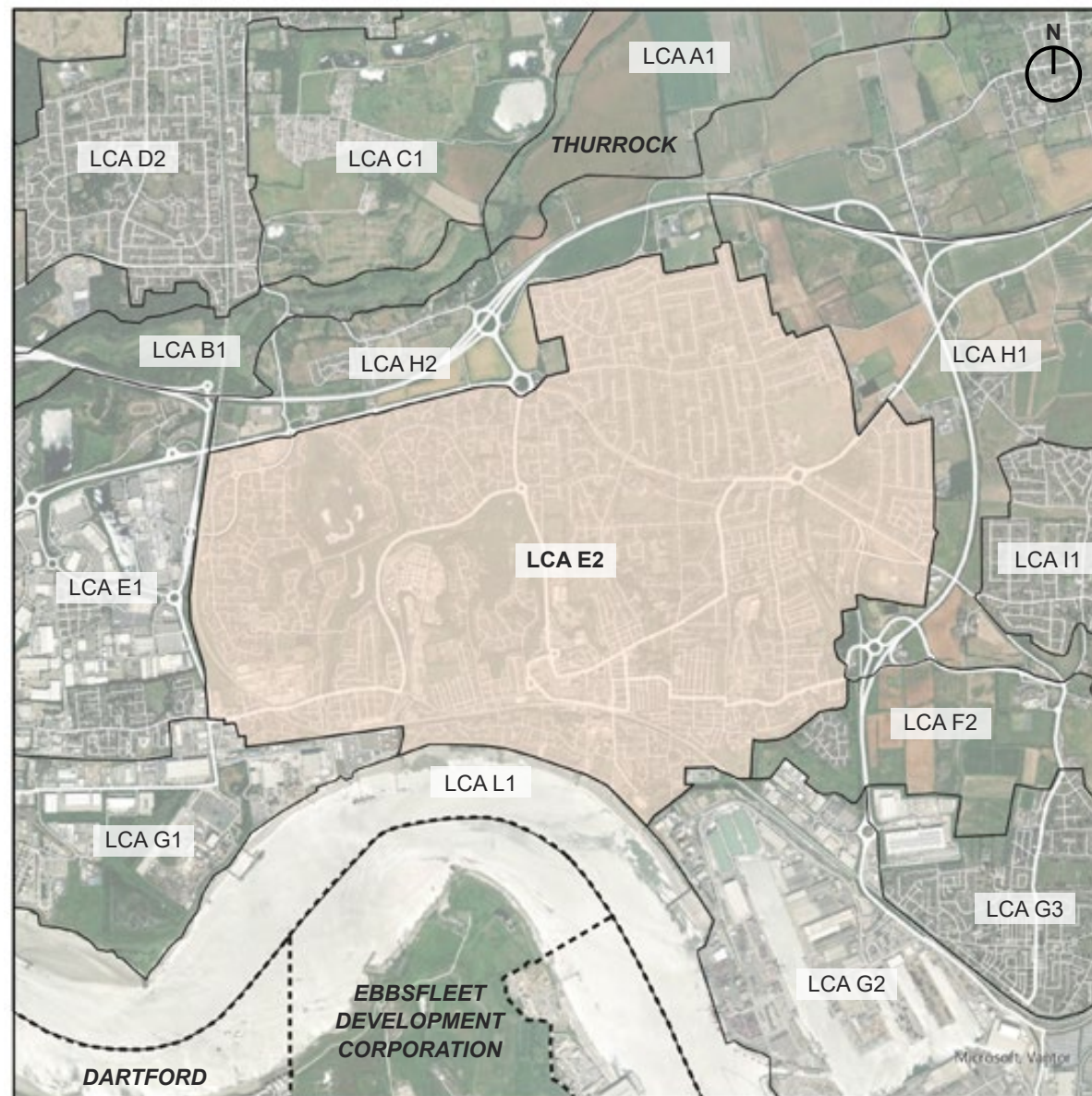


Figure 10: LCA E2: Grays, Chafford Hundred & South Stifford

3.7.2 Landscape value

Table 19 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA E2: Grays, Chafford Hundred & South Stifford.

Table 19: LCA E2: Grays, Chafford Hundred & South Stifford - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Lion Pit SSSI; Grays Thurrock Chalk Pit SSSI; Globe Pit SSSI; Hangman’s Wood & Deneholes SSSI • Warren Gorge, Lion Gorge, Mill Wood and Cliff, Gray’s Pit Extension, Sandmartin Cliff, Grenville Road Grasslands, Anchor Field and Titan Works Local Wildlife Sites
Natural heritage	• Disused chalk quarries contain much biodiversity interest • Grays Thurrock Chalk Pit SSSI (best concentration and diversity of calcareous invertebrate fauna in Essex); Lion Pit SSSI; Globe Pit SSSI; Hangman’s Wood & Deneholes SSSI • Notable areas of deciduous woodland, particularly around the chalk quarries and at Hangman’s Wood (a SSSI and Ancient Woodland) • Grays Chalk Pit supports rare calcareous flora and invertebrate fauna and is designated a SSSI for these rare assemblages • Chafford Gorges Nature Park: grassland, meadow, ponds and woodland, containing designated Local Wildlife Sites and Priority Habitats for deciduous woodland and chalk loving plants. There is also a network of pathways and information for visitors • Local Wildlife Sites supporting chalk grassland and providing ecological corridors to other pits
Cultural heritage	• Hangman’s Wood contains medieval chalk mines (The Deneholes Scheduled Ancient Monument) • Lion Pit reveals the sequence of Pleistocene Thames deposits overlying Chalk, representing the northern edge of the river’s floodplain at the time of deposition (a geological SSSI) • Locally interesting buildings include the Church of St Peter and St Paul (Grade II listed¹⁴), which retains a 13th century north tower; the Grade II* listed Church of St Mary the Virgin on Dock Road, Little Thurrock • Pleistocene gravels at Grays have yielded a remarkable series of mammalian remains, including those of the wild cat, spotted hyena, wolf, bear, bison, hippopotamus and mammoth • Surviving remnants of the settlement include the parish church of St Mary which has surviving 12-15th century fabric.
Landscape condition	• In some areas the townscape is poor quality because of street clutter and poor-quality public realm around tower blocks • Building facades are often poor quality or decaying and amenity green space is often bland and sometimes poorly maintained
Associations	• State Cinema Grade II* listed building is one of the few remaining examples of the picture palaces that were built all over the country • Gray family had a 300-year association with the area – and first purchased the manor of ‘Thurrock’ in 1195 from Isaac the Jew, having gained permission from King Richard the Lionheart • Alfred Russel Wallace (1823–1913), naturalist and joint discoverer, with Darwin, of the theory of natural selection, came to Grays in 1871 and built the Dell (1872 – still surviving and protected by listing status) on the heights above the overgrown chalk quarry north-east of the town

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FACTOR	EVIDENCE
Distinctiveness	• Extensive chalk quarrying since the 18th century, altering its natural topography and creating deep pits in the landform • Mixed age area including Victorian buildings and post-1980s high rise blocks which form landmarks; Housing predominantly dates from the post-war period on the outskirts of Grays • Large areas of post-war and 20th century housing, including large residential estates in restored quarries at Chafford Hundred • Grays does not have a distinctive settlement form - Aside from Grays town centre, the rest of Grays has undergone urban sprawl and lacks clear structure. Busy roads and a large supermarket and car park dominate the area just north of the railway station • The lack of landmarks and similar style of houses and roads creates weak legibility in this area • Positive qualities include several tree-lined residential streets which contribute to a 'leafy' suburban character in Grays and the well- maintained riverside area and Grays Beach Riverside Park, and in Chafford Hundred, Chafford Gorges Nature Park • Gateways are usually bland and unwelcoming and transport corridors provide barriers to pedestrian movement
Recreational	• Restored quarry sites provide valuable natural character and recreational amenity, with footpaths and information for visitors • Chafford Gorges Nature Park: grassland, meadow, ponds and woodland, containing designated Local Wildlife Sites and Priority Habitats for deciduous woodland and chalk loving plants. There is also a network of pathways and information for visitors • The visitor centre and Chafford Hundred Nature Park is a key destination but is located within the warren of residential housing estates • Proposed Grays-Tilbury Station-Tilbury Fort Green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map • Proposed Grays-Chadwell St Mary-Stanford-le-Hope green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	• River Thames to the south provides a valuable setting and sense of place – the location of Grays on the river enables panoramic views along and across the River Thames including from Grays Beach • Generally, the sense of place is weak, particularly within residential areas where views to the waterfront or landscape setting are blocked by buildings • Dominance of 20th century development in mass produced materials and lack of urban structure - Detractors include tower blocks near Grays riverside and industrial buildings • Scenic features include woodland and chalk cliffs at Chafford Gorges Nature Park, the Thames promenade walk and buildings with historic or visual interest including the South Essex College development and historic churches • Thames promenade and riverside walk offer a sense of openness and expansiveness, and much visual interest from moving ships and nearby industry • View from Gray's Beach • The chalk pits have enabled views, for example long range panoramic vistas from the top of the quarry sides of the Chafford Gorges
Perceptual (wildness and tranquility)	• Large-scale road and rail corridors and areas of industrial development - several areas with heavy industry units, factories and depots as well as scattered shops and services including Grays Shopping Centre • Chafford Gorges Nature Park provides a sense of quiet and peacefulness, with walking trails and information and connection to nature as well as the history and geology of the area • Large expanses of grey concrete within Grays and yellow brick within Chafford Hundred provide a sense of monotony, with noise and visual intrusion from main roads in proximity to popular visitor areas a distraction
Functional	• Large urban conurbation of predominantly residential development

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There are no landscape designations that cover LCA E2: Grays, Chafford Hundred & South Stifford. This LCA consists of a large area dominated by mainly postwar, large-scale residential development. The built environment contains several visual detractors. The LCA contains several areas of ecological value, including several SSSI designations and Local Wildlife Sites, mainly consisting of rewilded disused chalk quarries; these also act as features of recreational value. The River Thames also plays an important role in the setting of the LCA to the south, providing panoramic views. The LCA contains some features of historical value, including The Deneholes Scheduled Ancient Monument and several older buildings and churches, some listed. There are several important transport corridors, which along with large-scale commercial and industrial development, disrupt any sense of tranquillity.

The value attached to LCA E2: Grays, Chafford Hundred & South Stifford is **low**.

3.7.3 Susceptibility and sensitivity to change

Table 20 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 20: LCA E2: Grays, Chafford Hundred & South Stifford - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	Low	A new urban area of this size would require substantial redevelopment of this area. The urban nature of the area, poor quality townscape and lack of sense of place currently reduce susceptibility to a redevelopment scheme – in fact redevelopment could create opportunities to improve the character and sense of place. Areas in the vicinity of biodiversity and historic interest (marked by designations) are more susceptible to change, and design would have to preserve the interest in these areas. Overall, the area has low susceptibility to urban development of this scale.	Low
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Low	The urban nature of the area, poor quality townscape and lack of sense of place currently reduces susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve the character and sense of place. The areas in the vicinity of biodiversity and historic interest are more susceptible to change, and design would have to preserve the interest in these areas. Overall, the area has low susceptibility to urban development of this scale.	Low
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very low	The urban nature of the area, poor quality townscape and lack of sense of place currently reduces susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve the character and sense of place. The areas in the vicinity of biodiversity and historic interest are more susceptible to change and design would have to preserve the interest in these areas. Overall, the area has very low susceptibility to urban development of this scale. Any development should preserve and aim to extend greenspace and use locally occurring species to reflect the underlying geology which should give this area its sense of place.	Very low

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DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The urban nature of the area, poor quality townscape and lack of sense of place currently reduce susceptibility to a redevelopment scheme of this size. The areas in the vicinity of biodiversity and historic interest are more susceptible to change, and design would have to preserve the interest in these areas. Overall, the area has very low susceptibility to urban development of this scale.	Very low
Flats (5-10 storeys in height)	Medium	Although the urban nature of this character area reduces susceptibility to flats, the ridgeline character and human scale increases susceptibility. Overall, this character area has medium susceptibility to flats (5-10 storeys). Such developments would be best incorporated into urban centres and away from skylines that are prominent in views from the adjacent lowlands (e.g. at the edge of ridges). Historic locations and rural edges have higher susceptibility.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Medium	This area contains large areas devoted to large-scale economic / industrial activity; the addition of this type of development may not result in a notable change depending on location. Susceptibility to this type of development is medium.	Medium
Lorry parks (3.5-8 Ha)	Medium	This area contains large areas devoted to large-scale economic / industrial activity; the addition of this type of development may not result in a notable change depending on location. Susceptibility to this type of development is medium.	Medium

3.8 LCA F1: Aveley Marshes

3.8.1 Overview

This area forms an expanse of undeveloped marshland west of Purfleet forming part of the Rainham Marshes RSPB Reserve. It is an area of semi-drained marshland located behind a sea wall that is managed for wildlife and contains drains, winding creeks and pools as well as public footpaths. It has a windswept and remote character and from the sea wall there are wide panoramic views across the River Thames.

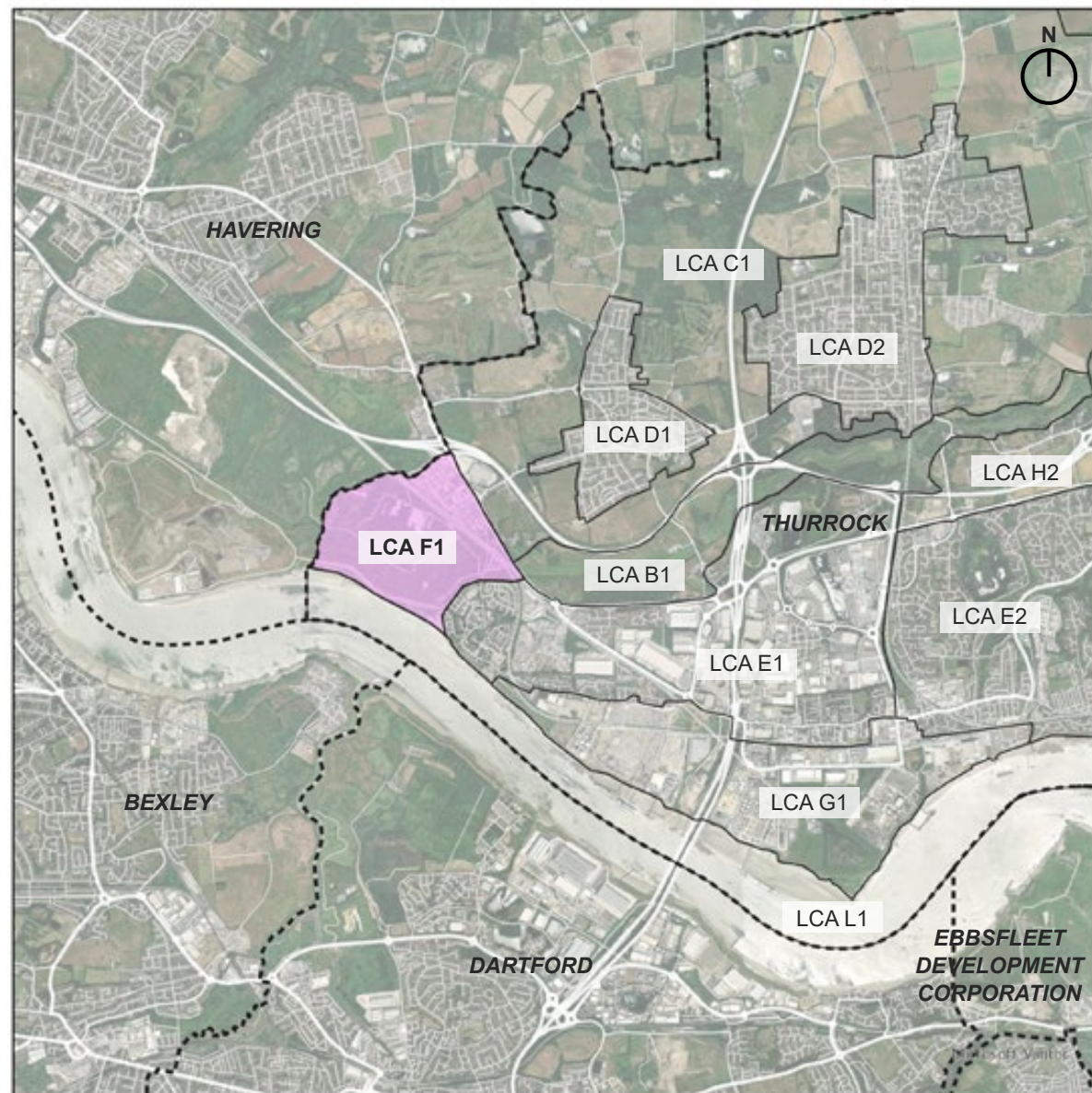


Figure 11: LCA F1: Aveley Marshes

3.8.2 Landscape value

Table 21 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA F1: Aveley Marshes.

Table 21: LCA F1: Aveley Marshes - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Rainham Marshes RSPB nature reserve • Inner Thames Marshes SSSI • Thames Chase Community Forest
Natural heritage	• Almost totally covered by coastal and floodplain grazing marshes interspersed with small areas of reed beds (both priority habitats) • Inner Thames Marshes support a variety of breeding birds, large numbers of wintering wildfowl, waders, finches and birds of prey, with wintering teal populations reaching levels of international importance and nationally rare wetland plants and insects • Narrow strip of undrained saltmarsh occurs between the sea wall and high-water mark
Cultural heritage	• Area has a very high potential to contain important archaeological and paleo-environmental deposits • There are a number of archaeological survivals from the use of the area by the military including a WWI Blockhouse and Rifle Butts
Landscape condition	• Majority of the marsh is well managed for wildlife and public access and is a harmonious naturalistic landscape in good condition • The Industrial Area, in particular has eroded the condition of the marshes
Associations	• Rainham Marshes Nature Reserve is a popular destination for birdwatchers and in December 2005, a sociable lapwing visited the marshes which attracted large number of visitors to the Nature Reserve
Distinctiveness	• Rare survival of medieval reclaimed marshland at the edge of the Thames on the outskirts of Greater London • Informal and naturalistic landscape pattern of brackish drains, meandering creeks, pools, lagoons, grazing marshes and reed beds, with visible origins of pre-18th century sinuous and co- axial fields, possibly dating back to Roman times • Open, short, tussocky grassland structure has been created on the eastern Wennington and Aveley Marshes where traditional management by sheep and cattle grazing is continued. This contrasts with the tall ungrazed grasslands on the Western Rainham Marshes
Recreational	• RSPB Visitor centre, constructed in 2006, creates a distinctive local landmark • Busy with breeding wading birds in spring and summer, and large flocks of wild ducks in winter, reaching levels of international importance which creates good birdwatching opportunities

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FACTOR	EVIDENCE
Perceptual (Scenic)	• Largely undeveloped nature of the marshes with expansive panoramic views across the Thames and marshes contributes to the scenic quality of the area • Purfleet Industrial Park (comprising 1960s and 1980s warehousing units) is located on the edge of the marshes • Large numbers of electricity pylons located outside the LCA create discordant features on the skyline.
Perceptual (wildness and tranquility)	• Windswept and remote character and from the sea wall there are wide panoramic views across the Thames • Lack of tree cover creates an open and windswept landscape with a feeling of relative wildness and remoteness, despite the views of buildings and pylons outside the area • Undeveloped nature of the marshes lends itself to a sense of naturalness but the presence of the industrial estate, A13 and electricity pylons has a degree of human influence over the area
Functional	• Expanse of undeveloped marshland • Area of semi-drained marshland located behind a sea wall that is managed for wildlife and contains drains, winding creeks and pools as well as public footpaths • Area of grazing marsh for sheep and cattle that is managed for wildlife and public access with a visitor centre in the east. Purfleet Industrial Park introduces an industrial land use into part of the area • Aveley Marshes provides part of the undeveloped gap between Purfleet and Rainham as well as an important nature conservation and recreational resource

There are no landscape designations that cover LCA F1: Aveley Marshes. This LCA consists almost entirely of undeveloped coastal and floodplain grazing marshes interspersed with small areas of reed beds, with the exception of a small self-contained industrial park. The majority of the LCA is designated SSSI and an RSPB reserve due to its ecological value; the visitor centre and footpaths also have important recreational value. Some grazing occurs near the coast. The open nature of the LCA has a remote character, which is partly compromised by views of electricity pylons, the A13 and the industrial estate.

The value attached to LCA F1: Aveley Marshes is **high**.

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3.8.3 Susceptibility and sensitivity to change

Table 22 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 22: LCA F1: Aveley Marshes - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	REASONING	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means susceptibility to a very large housing area is very high. A new settlement of this size would completely change this landscape.	Very high
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means susceptibility to a large housing area is very high. A new settlement of this size would completely change this landscape.	Very high
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means susceptibility to a substantial housing area is very high. A new settlement of this size would completely change this landscape.	Very high
Small Housing area (75-299 dwellings / 2.5-11 Ha)	High	Most of this area is dominated by marshland of an open, naturalistic and undeveloped character; development of this scale would likely result in a change in character, however, the minor presence of some development results in a reduction in susceptibility. Susceptibility to a small housing area is high.	High
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	Most of this area is dominated by marshland of an open, naturalistic and undeveloped character; development of this scale may result in a change in character, however, the minor presence of some development results in a reduction in susceptibility. Susceptibility to a minor housing area is medium.	High
Flats (5-10 storeys in height)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means that buildings of this scale would be a distinct and notable addition in this open naturalistic landscape. Susceptibility to flats is very high.	Very high
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means susceptibility to major warehouse development of this size is very high. These types of structures would be incongruous in this open naturalistic landscape.	Very high
Lorry parks (3.5-8 Ha)	Very high	The open, naturalistic and undeveloped character of this area and its time depth means susceptibility to lorry parks is very high. The only area likely to be able to accommodate a lorry park would be the Juliette Way Industrial Area to the north of the railway.	Very high

3.9 LCA F2: Tilbury Marshes

3.9.1 Overview

Tilbury Marshes wrap around Tilbury, forming the area of open flat drained marshland between LCA H1: East & West Tilbury to the north and LCA L2: Gravesend Reach to Sea Reach of the River Thames to the south and includes Tilbury Fort and the emerging Port of Tilbury development. The northern boundary is defined by the 5m contour line at the foot of the Chadwell scarp while the southern boundary is defined by the high water mark of the River Thames. The western boundary meets the edge of Grays (part of LCA E2: Grays, Chafford Hundred & South Stifford) and the south- western/ southern boundaries are defined by the developed marshland areas of LCA G2: Tilbury Docks and LCA G3: Tilbury. The area is made up of a number of more localised marshes that merge into once another, from west to east these are: Little Thurrock Marshes, Tilbury Marshes, West Tilbury Marshes and East Tilbury Marshes.

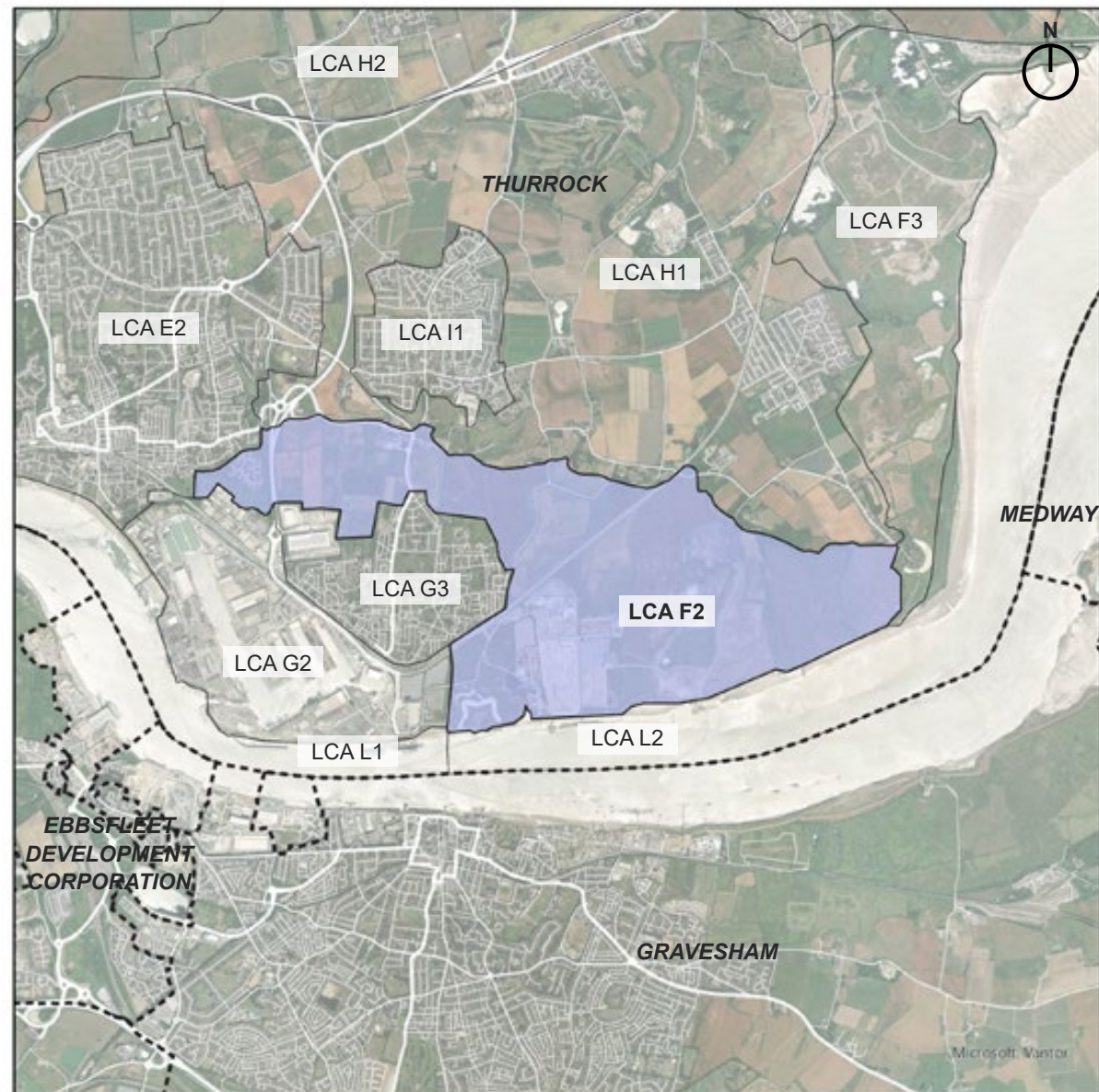


Figure 12: LCA F2: Tilbury Marshes

Legend

- Local Planning Authority boundary
- Landscape Character Area boundary

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3.9.2 Landscape value

Table 23 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA F2: Tilbury Marshes.

Table 23: LCA F2: Tilbury Marshes - Landscape value

FACTOR	EVIDENCE
Relevant designations	Local Wildlife Sites
Natural heritage	- Coastal and floodplain grazing marshes (a priority habitat) and wet grassland are prevalent throughout the LCA, and many are designated as Local Wildlife Sites - Reedbeds also populate the watercourses traversing the area - Area is an important nature conservation resource, especially Tilbury Marshes as well as East and West Tilbury Marshes
Cultural heritage	- Tilbury Fort is an historic defensive site and unique feature due to its four diamond shaped buttresses forming an overall pentagon, and one of the best-conserved examples of late 17th century military engineering in England - St James Church sits on the top of this scarp, providing a local landmark at West Tilbury - Manor farming practices dating back to the medieval era still survive on Tilbury Marshes in the form of commons - Construction of man-made sea walls along the Thames Estuary dates back at least to the Middle Ages and probably earlier - Tilbury Fort has occupied the area since the 16th century (whole site is Scheduled Ancient Monument) - one of the best-conserved examples of late 17th century military engineering in England.
Landscape condition	- Some artificially raised landfill area reaching 10m AOD, all enclosed by a sea wall - Some of the original irregular field patterns still remain but most have been straightened since the 1950s - Deep soils give rise to good agricultural land (except where the ground has been worked for mineral and infilled, or disrupted by industry) - Gradual change due to various pressures including drainage for agriculture (and specifically arable), mineral extraction, landfill and industry - Condition varies across the area – areas of intact grazing marsh are in better condition than areas that have been subject to mineral extraction / landfill, intensive arable farming and industry, although some of the former landfill sites are in the process of being restored
Associations	Queen Elizabeth visited her troops assembled at West Tilbury during the height of the Spanish Armada, August 1588
Distinctiveness	- Large expanse of flat, low-lying drained farmland enclosed to the north by the Chadwell ridge (the historic coastline) - Drainage ditches marking field boundaries - Broad borrow dykes at the back of the sea wall are distinctive features - Buildings in the estate on the edge of Grays are typical of 1990s semi-detached and detached houses, built from red and yellow brick with concrete roof tiles. Tile cladding is also common

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FACTOR	EVIDENCE
Recreational	• England Coast Path • Proposed Grays-Tilbury Station-Tilbury Fort Green link, from the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) map
Perceptual (Scenic)	• Open and exposed nature of the landscape allows long distance views over the marshes, and the sea wall provides opportunities for views over the Thames Estuary • Open character means skylines are dominated by any tall structures – including pylons and Tilbury Substation within the LCA and industrial development outside the area. Despite this, the marshes have a relatively remote character • Presence of grazing marsh and the dramatic Chadwell Ridge that forms a backdrop to the north contribute to scenic quality • Detractors include large-scale commercial buildings, electricity infrastructure, areas of disturbed / raised ground which interrupt open views, and modern residential development
Perceptual (wildness and tranquility)	• Large-scale commercial buildings and overhead pylons have a strong industrial influence in this otherwise largely undeveloped landscape • Settlement is not characteristic of this area today, with the exception of a small area of late 20th century housing associated at Little Thurrock Marshes • A number of roads and the railway line traverse the area, fragmenting the area • Area is largely influenced by the neighbouring urban area of Tilbury as well as the utilities infrastructure. This includes a concentration of overhead pylons immediately adjacent. Despite this, the marshes have a relatively remote character
Functional	• In use as agricultural land, grazing marsh and productive arable fields • Area provides an undeveloped gap between Tilbury and Chadwell St Mary and an important nature conservation resource and rural setting to the Thames

There are no landscape designations that cover LCA F2: Tilbury Marshes. This LCA contains both grazing marsh and productive arable land, with very little development. Several of the marshes and reedbeds are designated as Local Wildlife Sites. Condition of these marshes varies, some degraded by mineral extraction activity. Some of the agriculture is considered intensive. The LCA acts as a gap and open space with a remote character between two settlements, home to identified green links. Its sense of rurality is affected by the presence of large-scale commercial buildings,

transport infrastructure and industrial development nearby. The area contains several features of historical interest, including a Scheduled Monument.

The value attached to LCA F2: Tilbury Marshes is **medium**.

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3.9.3 Susceptibility and sensitivity to change

Table 24 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 24: LCA F2: Tilbury Marshes - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	REASONING	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	Despite the presence of large-scale industrial activity, the open and rural character of most of this area (and its typical lack of settlement) means that a new settlement of this size would take up a substantial part of the area. Susceptibility to a very large housing area is very high.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	High	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; although development of this scale is likely to result in a notable change to the area, the presence of existing development and the scale of the area can reduce susceptibility. Susceptibility to a large housing area is high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	High	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; although development of this scale is likely to result in a notable change to the area, the presence of existing development and the scale of the area can reduce susceptibility. Susceptibility to a substantial housing area is high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Medium	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; development of this scale would not necessarily result in a notable change to the area due to the presence of existing development and the scale of the area, reducing susceptibility. Susceptibility to a small housing area is medium.	Medium
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; development of this scale would not necessarily result in a notable change to the area due to the presence of existing development and the scale of the area, reducing susceptibility. Susceptibility to a minor housing area is medium.	Medium

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DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	REASONING	SENSITIVITY
Flats (5-10 storeys in height)	High	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; while development of this scale is likely to result in a notable change to the area, the presence of existing development and the scale of the area can reduce susceptibility. Susceptibility to flats is high.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Medium	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; development of this scale would not necessarily result in a notable change to the area due to the presence of existing development and the scale of the area, reducing susceptibility. Susceptibility to this type of development is medium.	Medium
Lorry parks (3.5-8 Ha)	Medium	While a large part of the area has an open and rural character, the area also contains substantial parts devoted to large-scale industrial activity; development of this scale would not necessarily result in a notable change to the area due to the presence of existing development and the scale of the area, reducing susceptibility. Susceptibility to this type of development is medium.	Medium

3.10 LCA F3: Mucking Marshes

3.10.1 Overview

Mucking Marshes are located between the Tilbury Marshes and the London Gateway Port development, between the high water mark of the Thames and approximately the 5m contour line. Below the high water mark is the River Thames (LCA L2: Gravesend Reach to Sea Reach). Above the 5m contour line to the north is LCA H3: Fobbing Ridge and LCA I2: Stanford-le-Hope & Corringham and to the west is LCA H1: East & West Tilbury.

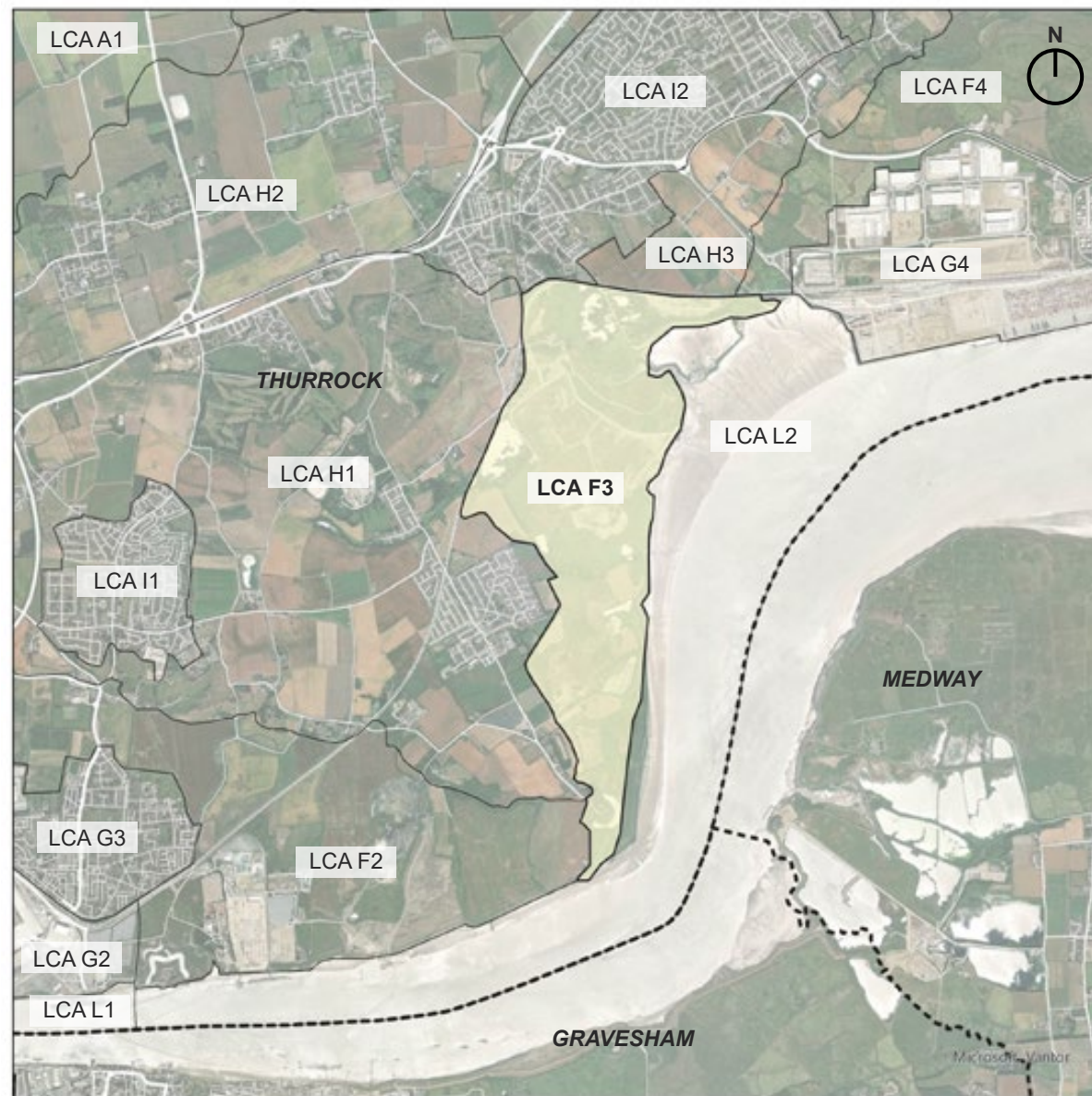


Figure 13: LCA F3: Mucking Marshes

3.10.2 Landscape value

Table 25 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA F3: Mucking Marshes.

Table 25: LCA F3: Mucking Marshes - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Mucking Flats & Marshes SSSI • Local Wildlife Sites • Thames Estuary & Marshes SPA / RAMSAR site (Wild Bird General License Protected Sites Condition Zone)
Natural heritage	• Mineral extraction sites (most of which have been or are being restored for biodiversity and recreation) occupy a large portion of the drained marshland area • Naturalistic areas of undrained marsh along the coast, outside the sea wall • Floodplain grazing marsh, reed beds (for example along Mucking Creek) and saltmarsh (outside the sea wall and in the lower Mucking Creek) – these are all priority habitats • Unenclosed saltmarsh outside the sea wall and the lower part of Mucking Creek form part of the Mucking Flats & Marshes SSSI and Thames Estuary and Marshes SPA and Ramsar site • Areas of open water and wetland habitats of reed beds, marsh and rough grassland on the former mineral sites are recognised as Local Wildlife Sites • Some deciduous woodland and parkland style gardens at Coalhouse Fort
Cultural heritage	• Coalhouse Fort is the most notable built feature in the area, a defensive structure on the edge of the Thames (Scheduled Ancient Monument)
Landscape condition	• Land is of moderate to good agricultural quality • Mineral extraction sites (now open waterbodies or landfill) occupy a large portion of the drained marshland area • Large area of managed realignment was undertaken as part of the London Gateway development and the area is now managed as Stanford Wharf Nature Reserve • In the early 20th century mineral extraction took place, altering the topography of the area and resulting in open water and landfill sites
Associations	• Visitor centre at the heart of Thameside Nature Park was designed by van Heyningen and Haward Architects and was opened by Sir David Attenborough who described the building as ‘revolutionary’ • Landfill site at Mucking Marshes was one of the largest in Europe utilising the former gravel quarry and created an artificial mound from years of waste compaction
Distinctiveness	• Historically been absent of built development except for the rural marshland hamlet of Mucking beside Mucking Creek • Since the 1950s the focus has been on restoration with many of the sites reinstated as nature parks and nature reserves or used to accommodate landfill

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FACTOR	EVIDENCE
Recreational	• Circular wooden visitor centre at Thurrock Thameside Nature Park (opened 2012) with a roof-top viewing deck • Coalhouse Fort was built in the 1860s at the south of Mucking Marshes to protect against seaborne attack. It served this function in a variety of forms before being decommissioned at the end of World War II. The fort has been restored for educational purposes, and its surroundings have been turned into parkland. It is designated as a scheduled monument • Some of these areas have been converted to nature reserves and areas with public access, such as the Thurrock Thameside Nature Park • England Coast Path • Proposed Coalhouse Fort to London Gateway Green link, from the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) map
Perceptual (Scenic)	• Successful restorations schemes, the natural meandering course of the Mucking Creek, coastal salt marshes, Coalhouse Fort and the long views from the sea wall and coastline • Detractors include the areas of disturbed and raised ground which interrupt open views • View from the Coalhouse Fort is important • The skyline is punctuated by prominent industrial structures in adjacent character areas such as the container cranes at London Gateway Port • Historic rural hamlet of Mucking
Perceptual (wildness and tranquility)	• Despite man’s influence on the landscape, the area has a strong sense of remoteness and relative wildness. This is an exposed and windswept rural landscape, except around Mucking where trees provide enclosure
Functional	• Area forms a link between the Thames and inland areas • Also important for nature conservation and recreation (there is a public footpath that runs almost the length of the sea wall)

There are no landscape designations that cover LCA F3: Mucking Marshes. This LCA is almost entirely natural or restored nature, with only a small rural historic hamlet. It comprises undrained and drained marsh with several designations, including a SSSI, SPA and Ramsar site and wetland habitats and deciduous woodland, some Local Wildlife Sites. The Nature Park contains a visitor centre and public footpaths. Those areas previously affected by draining and mineral extraction are being successfully restored back to their natural state. All this leads an area providing openness, wildness and remoteness. There is also a Scheduled Ancient Monument in the area. Some remaining disturbed land and industrial structures detract from the sense of rurality.

The value attached to LCA F3: Mucking Marshes is **high**.

3.10.3 Susceptibility and sensitivity to change

Table 26 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 26: LCA F3: Mucking Marshes - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a very large housing area is very high.	Very high
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a large housing area is very high.	Very high
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a substantial housing area is very high.	Very high
Small Housing area (75-299 dwellings / 2.5-11 Ha)	High	Most of this area is dominated by open marshland; development of this scale would likely result in a change in character, however, the minor presence of some development results in a reduction in susceptibility. Susceptibility to a substantial housing area is high.	High
Minor Housing (under 75 dwellings / under 2.5 ha)	High	Most of this area is dominated by open marshland; development of this scale would likely result in a change in character, however, the minor presence of some development results in a reduction in susceptibility. Susceptibility to a substantial housing area is high.	High
Flats (5-10 storeys in height)	Very high	The open and undeveloped character of this area means that buildings of this scale would be a notable and distinct addition in this flat, open and largely undeveloped landscape. Susceptibility to flats is very high.	Very high
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The open and undeveloped character of this area means that structures associated with this development would be very noticeable additions in this flat, open and largely undeveloped landscape. Susceptibility to major warehouse development of this size is very high.	Very high
Lorry parks (3.5-8 Ha)	Very high	The open and undeveloped character of this area and the sense of tranquillity and dark skies, means susceptibility to lorry parks is very high.	Very high

3.11 LCA F4: Fobbing Marshes and Haven Creek

3.11.1 Overview

The Fobbing Marshes & Haven Creek is located between the high water mark and the 5m contour line at the eastern end of Thurrock. Above the 5m contour line to the west is the low ridge of LCA H3: Fobbing Ridge and below the high water mark to the east is Holehaven Creek which forms part of LCA L2: Gravesend Reach to Sea Reach. To the south is an area of developed marsh (LCA G4: London Gateway Port) – the boundary being marked by the edge of the urban area which coincides with the A1014 along part of its length. The undeveloped marsh character extends over the administrative boundary into Basildon and Castle Point to the north and east forming part of the South Essex Marshes Environmentally Sensitive Area.

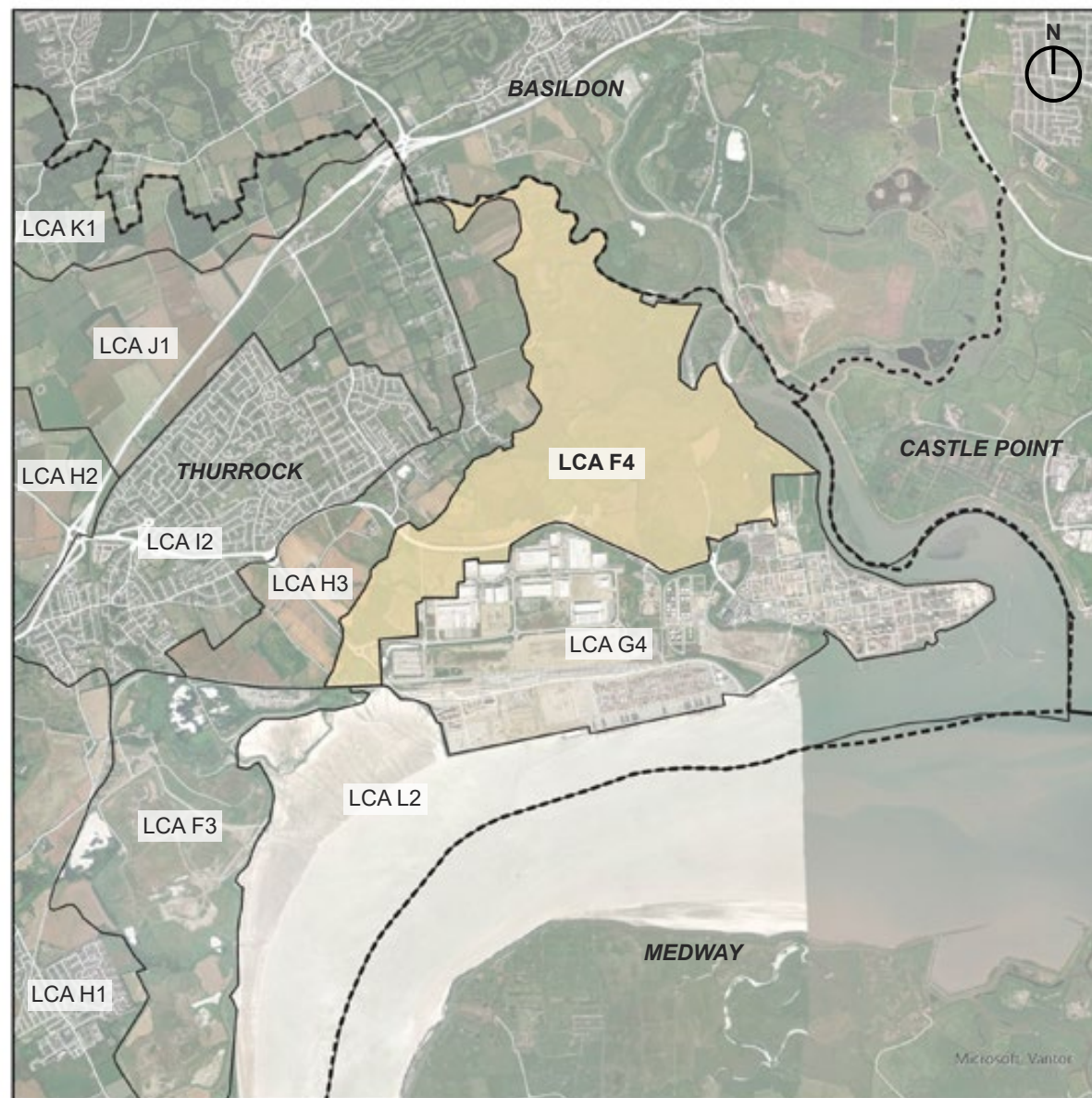


Figure 14: LCA F4: Fobbing Marshes and Haven Creek

Legend

- Local Planning Authority boundary
- Landscape Character Area boundary

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3.11.2 Landscape value

Table 27 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA F4: Fobbing Marshes and Haven Creek.

Table 27: LCA F4: Fobbing Marshes and Haven Creek - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Vange and Fobbing Marshes SSSI • Local Wildlife Sites • Adjacent to Thames Estuary & Marshes SPA in form of Wild Bird General License Protected Sites Condition Zone (in very south) • Adjacent to South Essex Marshes RSPB Reserve
Natural heritage	• Predominantly coastal and floodplain grazing marsh • Ecologically-rich areas of unimproved coastal grassland supporting a rare assemblage of maritime grasses and herbs being designated as Vange and Fobbing Marshes SSSI • Vange and Fobbing Marshes SSSI supports a diversity of maritime grasses and herbs which form an outstanding assemblage of nationally rare plants as well as ideal habitats for a number of invertebrates and birds. The SSSI is almost entirely surrounded by Corringham/Fobbing Marshes Local Wildlife Site
Cultural heritage	• Area is also the location of a number of archaeological features including a World War II Oil QF bombing decoy in the centre of the marshes which is listed as a Scheduled Monument
Landscape condition	• Agricultural quality of soils is influenced by distance from Holehaven Creek with closest to the creek being Grade 4 and those further inland Grade 3 (and some areas of Grade 2) • These marshes have been subject to relatively little human intervention over the years (the Historic Landscape Classification identifies most of the area as coastal drained enclosure) and only recently have relatively small areas undergone major agricultural modification (marked as 20th century agriculture on the HLC) • Open expanse of grazing marsh is generally in good condition. However, some areas have been converted to arable which detracts from the harmonious pastoral character • Industrial areas tend to be in poor condition and detract from the landscape
Associations	• No known associations
Distinctiveness	• Naturalistic character of much of the marshes, the meandering creeks and views to rural backdrops of hills provide a relatively high scenic quality

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FACTOR	EVIDENCE
Recreational	- Several public rights of way traversing the area connect Fobbing with Basildon in the northeast and enable enjoyment of the landscape - England Coast Path
Perceptual (Scenic)	- Langdon Hills form a well-wooded, gently rolling skyline provides a rural backdrop to the north and St Michael's Church situated on the small, wooded ridge at Fobbing provides a landmark to the west - A few buildings in the area are in a modern industrial style, built with mass-produced materials such as modern red and yellow brick, corrugated steel and concrete tile or corrugated roofs - Number of features that detract from this including the modern industrial buildings, areas of intensive arable land, overhead powerlines and industrial buildings in adjacent areas - Flat and open landscape enables long-distant, panoramic views across the marshes and Holehaven Creek to rural backdrops. However, these are regularly punctuated by pylons as well as the oil tanks, cranes and warehouse development at London Gateway to the south - Undeveloped marshes are an important feature in views from Fobbing Ridge in the adjacent character area - Langdon Hills form a well-wooded, gently rolling skyline and provides a backdrop to the marshes in the north
Perceptual (wildness and tranquility)	- Development and roads were historically absent from the marshes, however, today the A1014 passes through the area and small industrial areas and overhead electricity lines which are prominent in the open landscape - Windswept and exposed landscape with a strong sense of naturalness and relatively dark skies. The sound of reeds in the wind creates a calm and tranquil experience - Influenced by industry in adjacent areas – the constant hum of substations around Coryton Power Station detract from the sense of tranquillity and oil tanks, cranes and warehouse development at London Gateway influenced views to the south - Open area of marshes is windswept and exposed with a strong sense of naturalness and little human influence. The area also has dark skies
Functional	- Land use is predominantly pastoral farmland although arable farmland is found around Fobbing. There are also areas of rough grazing - Marshes provide a rural and undeveloped area between Corringham to the west, Basildon to the north and South Benfleet/ Canvey Island to the east - Provide an important nature conservation and recreational resource

There are no landscape designations that cover LCA F4: Fobbing Marshes & Haven Creek. This LCA does not contain any development and predominantly consists of grazing marsh, some areas designed as Local Wildlife Sites. It also contains some grassland designated as a SSSI. Overall, the area is open, tranquil and remote, offers numerous public rights of way as well as relatively dark skies. Some roads and industrial areas detract from the tranquillity in parts. The LCA is also home to a number of archaeological features and a Scheduled Monument.

The value attached to LCA F4: Fobbing Marshes & Haven Creek is **high**.

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3.11.3 Susceptibility and sensitivity to change

Table 28 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 28: LCA F4: Fobbing Marshes and Haven Creek - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a very large housing area is very high.	Very high
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a large housing area is very high.	Very high
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The open and undeveloped character of this area means that a new settlement of this size would completely change this landscape. Susceptibility to a substantial housing area is very high.	Very high
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very high	The open and undeveloped character of this area means that a small housing area would completely change this landscape. Susceptibility to a small housing area is very high.	Very high
Minor Housing (under 75 dwellings / under 2.5 ha)	Very high	The open and undeveloped character of this area means that a development of this size would completely change this landscape. Susceptibility to a minor housing area across most of the area is very high. However, the hamlet of Mucking will have a lower susceptibility to very small numbers of houses.	Very high
Flats (5-10 storeys in height)	Very high	The open and undeveloped character of this area means that buildings of this scale would be very noticeable additions in this flat, open and undeveloped landscape. Susceptibility to flats is very high.	Very high
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The open and undeveloped character of this area means that structures associated with this type of development would be incongruous in this flat, open and undeveloped landscape. Susceptibility to major warehouse development of this size is very high.	Very high
Lorry parks (3.5-8 Ha)	Very high	The open and undeveloped character of this area and the sense of tranquillity and dark skies, means susceptibility to lorry parks is very high.	Very high

3.12 LCA G1: West Thurrock Marshes

3.12.1 Overview

This is an area of intensive industry including factories and freight infrastructure on reclaimed marshland, amongst which lies the medieval Church of St Clement's. The West Thurrock Lagoon and Marshes (an area of brownfield habitat) provides respite from the industrial land use at the southern tip (Stone Ness). The M25 bisects the area from north to south and the Queen Elizabeth II Bridge dominates the skyline across the river.



Figure 15: LCA G1: West Thurrock Marshes

3.12.2 Landscape value

Table 29 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA G1: West Thurrock Marshes.

Table 29: LCA G1: West Thurrock Marshes - Landscape value

FACTOR	EVIDENCE
Relevant designations	West Thurrock Lagoon & Marshes SSSI
Natural heritage	- Drained by small drains marked by localised areas of deciduous woodland - West Thurrock Lagoon and Marshes provide a more naturalistic area of open mosaic habitat, reed beds and intertidal mudflats which provide high tide roosts for wintering waders and wildfowl; most vegetation is concentrated within the West Thurrock Lagoon and Marshes, designated as a SSSI - Vegetation across the area generally comprises scrubby roadside planting, some of which is open mosaic habitat, containing nationally important invertebrate assemblages - Churchyard at St Clement's has been managed as an ecological garden in recent years and includes deciduous woodland that is important for biodiversity
Cultural heritage	- Medieval Church of St Clement's - Extensive archaeological deposits have been identified including a Mesolithic and Neolithic flint working site and a medieval manor house
Landscape condition	Unmanaged vegetation along roadsides gives sense of a landscape in poor condition Previous open marshland character has been all but lost (a relatively small area still remains at West Thurrock Lagoon and Marshes)
Associations	- The Dartford-Thurrock Crossing is the busiest estuarial crossing in the United Kingdom and is currently the only crossing east of Greater London - St Clement's Church featured in the film 'Four Weddings and a Funeral'
Distinctiveness	- Intensive industry including factories and freight infrastructure on reclaimed marshland - Modern warehousing units, oil and mineral storage tanks and a formed power station reached by wide service roads giving rise to a heavily industrialised landscape - Artificially drained and industrial nature of the landscape - Visual connections to and from the Thames and the presence of the Queen Elizabeth II Bridge provide a sense of place - Industrial complexes, roads and railway also fragment the landscape leading to a lack of cohesion

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FACTOR	EVIDENCE
Recreational	• West Thurrock Lagoon and Marshes provides a naturalistic setting to the industry • Very limited public access within the area, but there is a footpath along the length of the sea wall which provides a route east-west across the area • One north-south footpath link west of St Clement's Church • Proposed Aveley-Purfleet green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	• Undeveloped marsh at Stone Ness and the surprise views of the historic church St Clement's provide pockets of higher scenic quality • Queen Elizabeth II Bridge is a prominent landmark on the skyline • Small pockets of higher scenic quality such as at the undeveloped marsh at Stone Ness and the surprise views of the historic church St Clement's) • Large-scale, often tall, buildings as well as the Queen Elizabeth II Bridge are dominant on the skyline
Perceptual (wildness and tranquility)	• Fencing surrounding warehousing and industrial units, roads and the railway act as barriers to pedestrian connectivity and the area lacks structure • Regular movement of freight traffic in and around the marshes creates an active and busy area of industry, noisy in places • Heavy industrial buildings associated with the Purfleet Thames Terminal combine with the strong influence of other utilities infrastructure to create a very busy and active landscape. The regular noise, smell and movement of freight lorries within the area creates a strong sense of industry
Functional	• Intensive industry including factories and freight infrastructure

There are no landscape designations that cover LCA G1: West Thurrock Marshes. This LCA is dominated by intensive industry. There is a general lack of vegetation across the area, except for a small area of SSSI-designated open marsh containing deciduous woodland and reedbeds. There is very limited public access across the LCA. Views are taken up primarily by industrial infrastructure; some visual connection to the River Thames exists. The area has few historical and archaeological features.

The value attached to LCA G1: West Thurrock Marshes is **very low**.

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3.12.3 Susceptibility and sensitivity to change

Table 30 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 30: LCA G1: West Thurrock Marshes - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Large housing area (1000-2999 dwellings / 33-100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very low	The man-altered and industrial nature of this marshland area, combined with the relatively poor condition and lack of sense of place reduce susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve condition and sense of place and improve linkages to the riverside. The naturalistic marshland areas would be more susceptible to change and any development would have to preserve these more naturalistic areas and the historic St Clement’s Church and its churchyard. Overall, the area has very low susceptibility to urban development of this scale.	Very low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The man-altered and industrial nature of this marshland area, combined with the relatively poor condition and lack of sense of place reduce susceptibility to a housing scheme of this size – a greater consideration is how existing industry would impact on amenity of residents if a small housing scheme were to be introduced. The naturalistic marshland areas would be more susceptible to change and any development would have to preserve these more naturalistic areas and the historic St Clement’s Church and its churchyard. Overall, this area has very low susceptibility to a housing development of this scale.	Very low

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DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Flats (5-10 storeys in height)	Low	Although man-altered and industrial nature of this area, combined with the relatively poor condition and lack of sense of place reduce susceptibility to flats, the open character increases susceptibility. Overall, this area has low susceptibility to flats. Such developments would be best incorporated into urban centres of new developments and away from the more naturalistic areas or St Clement's Church.	Very low
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very low	The area is almost fully dedicated to large-scale industrial activity; this type of development is very unlikely to lead to notable change. This area has very low susceptibility to this type of development.	Very low
Lorry parks (3.5-8 Ha)	Very low	The man-altered, industrial nature and large-scale of this marshland area, combined with the relatively poor condition and existing presence of a lorry park means the area has very low susceptibility to lorry parks, particularly on brownfield sites. The naturalistic marshland areas and locations close to the historic St Clement's Church and its churchyard would be more susceptible.	Very low

3.13 LCA G2: Tilbury Docks

3.13.1 Overview

Tilbury Docks is a distinct area of flat drained marsh that has been developed as commercial warehousing and freight infrastructure including crane cranes along the dockside. The area has a large-scale industrial character and vegetation is limited to trees and scrub lining roads, ditches and the railway.

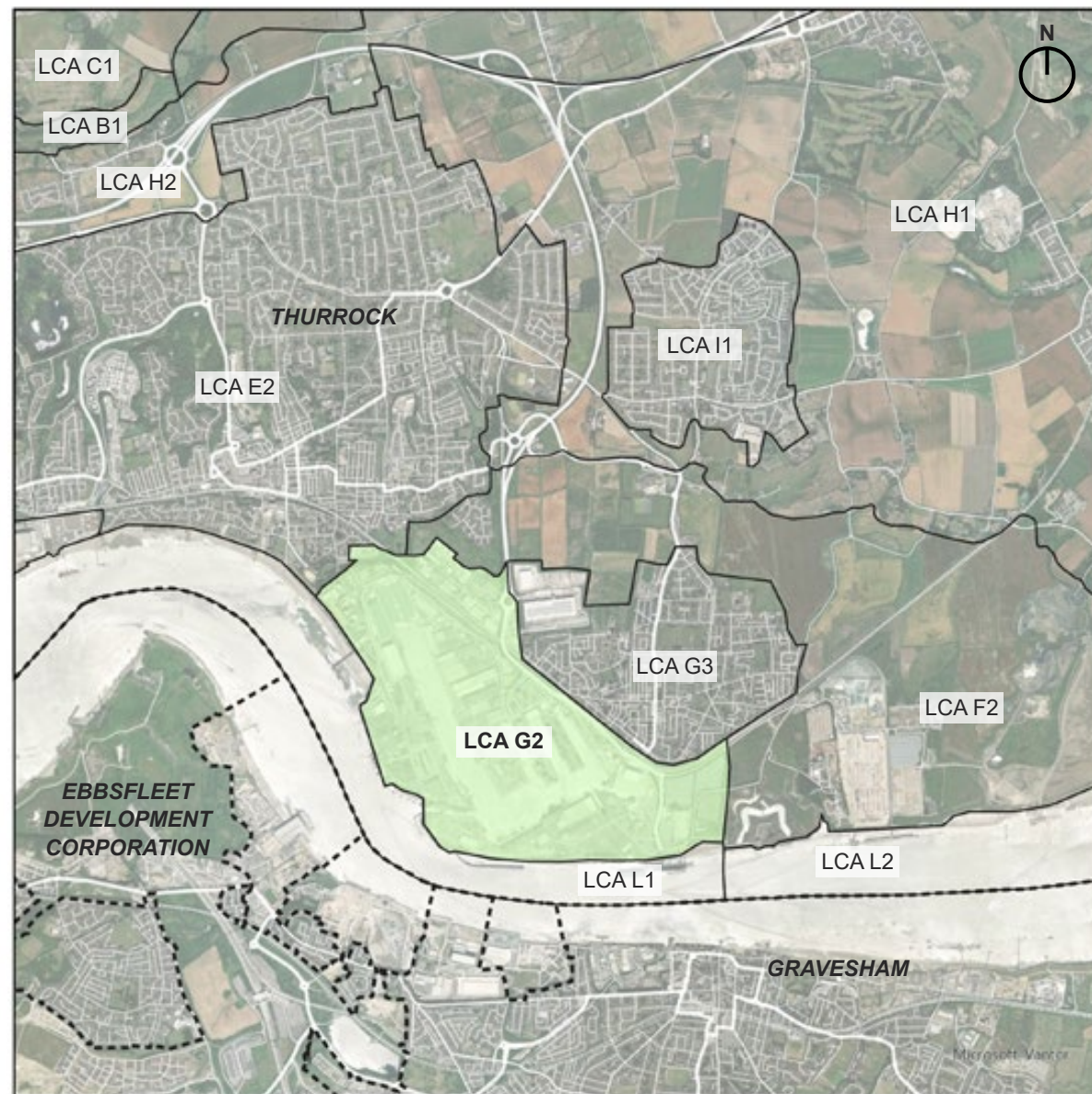


Figure 16: LCA G2: Tilbury Docks

3.13.2 Landscape value

Table 31 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA G2: Tilbury Docks.

Table 31: LCA G2: Tilbury Docks - Landscape value

FACTOR	EVIDENCE
Relevant designations	• None
Natural heritage	• Vegetation is limited to trees and scrub lining roads, ditches and the railway • Notable for its lack of green space and biodiversity • Vegetated drains which provide rare areas of biodiversity interest and form part of a green infrastructure network
Cultural heritage	• Operational docks built by the East and West India Docks Company in the 1880s (but now largely remodelled)
Landscape condition	• Scrubby appearance of vegetation, industrial style materials and boundaries in poor condition (particularly along the north adjacent to Tilbury) detract from landscape quality
Associations	• Tilbury Docks was the landing place of the SS Empire Windrush in 1948, which was the first ship to bring a large group of migrants from the Caribbean to the UK • House of Daniel Defoe has been subject to much investigation and misconceptions. Recent research located the property at the current site of Tilbury Docks from a military surveyor's sketch from between 1713 and 1730. This illustrated the house and neighbouring barn facing towards the Thames along the waterfront at Tilbury Fort including the churches at Chadwell and West Tilbury • The significance of the dock to the local economy inspired the motto of the borough, "By Thames to all peoples of the world"
Distinctiveness	• Large-scale industrial character • International Cruise Terminal is a distinctive feature with its 1930s built terminal building (which is listed) being used as the backdrop for numerous films and television dramas • The Worlds End pub adjacent to Tilbury Fort provides an interesting building in the local vernacular style with a weather-boarded exterior • Warehouses and cranes and the physical connection the docks have with the riverside creates a strong sense of place • There are also a number of landmarks throughout the docks including communication masts and crate cranes along the dockside • Cranes along the dockside contribute to this distinctiveness
Recreational	• Area is virtually inaccessible to the public • Poor links between the settlement of Tilbury in the north and the waterfront in the south, although there is a footpath that runs along the eastern boundary linking Tilbury to the Worlds End Pub and Tilbury Fort • Proposed Grays-Tilbury Station-Tilbury Fort Green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map

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FACTOR	EVIDENCE
Perceptual (Scenic)	• Although this is an industrial area it is harmonious in that the docks provide a consistent land use and structure for the area • Poor quality boundaries detract from scenic quality • Riverscape of the Thames forms much of the setting of the docks to the south with the settlement of Tilbury and Grays bordering the area to the north • Where there is public access (e.g. to the Worlds End Pub next to Tilbury Fort) the sea wall prevents views of the Thames from ground level
Perceptual (wildness and tranquility)	• Fenchurch Street to Shoebury railway passes through the area • Massing of buildings and freight infrastructure together with the almost constant noise intrusion from vehicles in and around the docklands creates an active and busy industrial landscape
Functional	• Commercial warehousing and freight infrastructure

There are no landscape designations that cover LCA G2: Tilbury Docks. This LCA is dominated by industry and crossed by a railway so does not have any sense of rurality. There are no residential areas, only a pub. The area is virtually inaccessible to the public. Vegetation is limited to roadsides and is generally in poor condition.

The value attached to LCA G2: Tilbury Docks is **very low**.

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.13.3 Susceptibility and sensitivity to change

Table 32 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 32: LCA G2: Tilbury Docks - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Large housing area (1000-2999 dwellings / 33-100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very low	The man-altered and industrial nature of this area combined with the relatively poor condition reduce susceptibility to a redevelopment scheme of this size; in fact, redevelopment could create opportunities to improve condition and sense of place and improve linkages to the riverside. The area has very low susceptibility to urban development of this scale.	Very low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The man-altered and industrial nature of this area combined with the relatively poor condition reduce susceptibility to a housing scheme of this size – a greater consideration is how existing industry would impact on amenity of residents if a small housing scheme were to be introduced. The area has very low susceptibility to a housing development of this scale.	Very low
Flats (5-10 storeys in height)	Low	Although the man-altered and industrial nature of this area combined with the relatively poor condition reduce susceptibility to flats, the open character increases susceptibility slightly. Overall, this area has low susceptibility to flats.	Very low
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very low	The area is almost fully dedicated to large-scale industrial activity; this type of development is very unlikely to lead to notable change. Susceptibility to this type of development is very low.	Very low
Lorry parks (3.5-8 Ha)	Very low	The area is almost fully dedicated to large-scale industrial activity; this type of development is very unlikely to lead to notable change. Susceptibility to this type of development is very low.	Very low

3.14 LCA G3: Tilbury

3.14.1 Overview

This area comprises the residential settlement of Tilbury, grown from a shanty town adjacent to Tilbury Docks in the 1880s and expanded rapidly in the inter- and post-war years over the open and flat marshland landscape. Today it is largely arranged in a grid pattern along two main roads orientated in a north-south and east-west alignment.

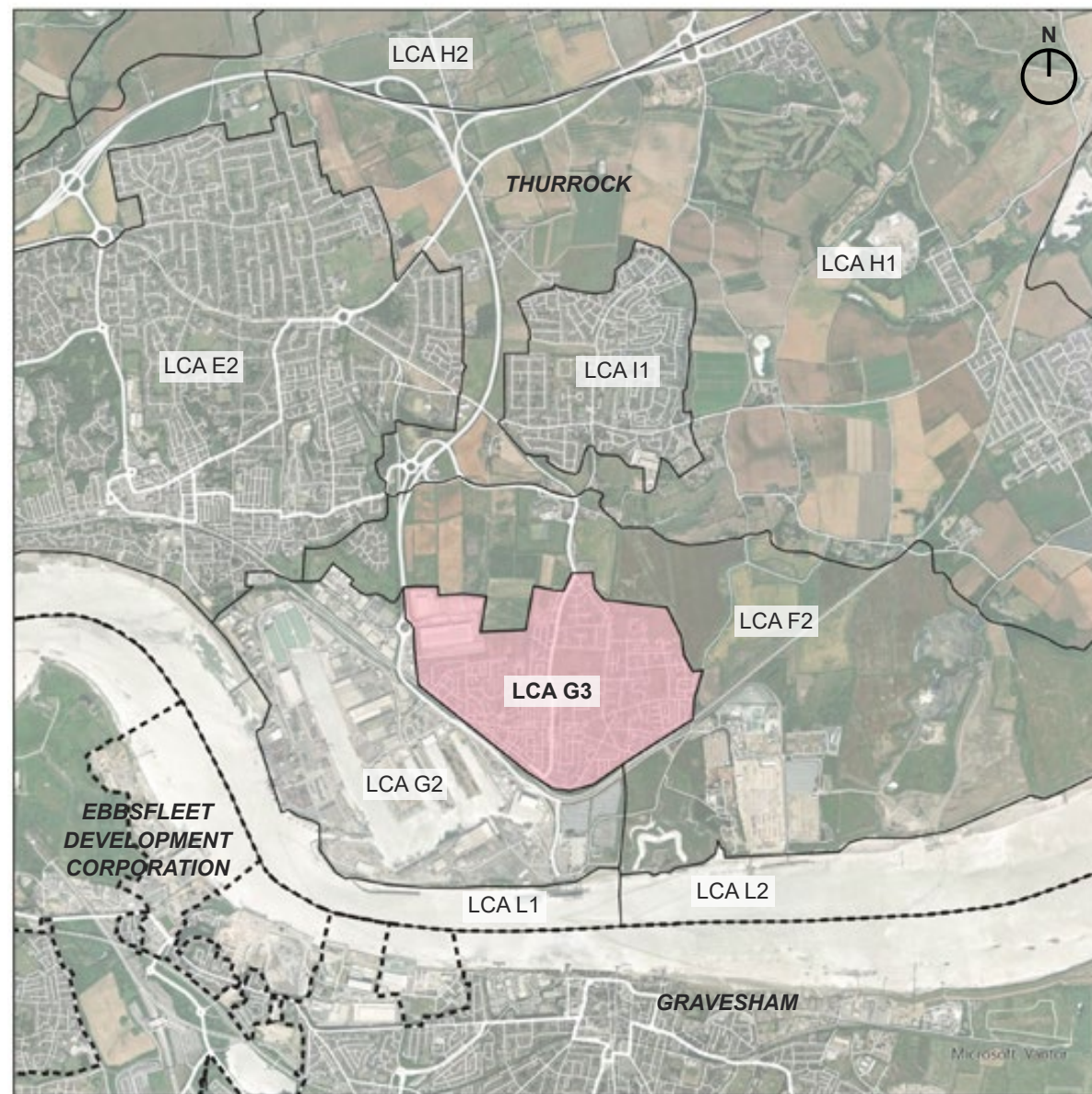


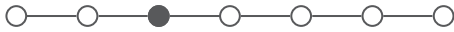
Figure 17: LCA G3: Tilbury

3.14.2 Landscape value

Table 33 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA G3: Tilbury.

Table 33: LCA G3: Tilbury - Landscape value

FACTOR	EVIDENCE
Relevant designations	• None
Natural heritage	• Pockets of green space including parkland with trees around the edges punctuate the built form: typically amenity grassland interspersed with trees
Cultural heritage	• None of note
Landscape condition	• Mass produced materials and poor condition in places detract from scenic quality
Associations	• Associated with the Tilbury Band, formed in Tilbury in 1919, and one the UK's best brass bands
Distinctiveness	• Post-war residential settlement located on flat low-lying marshland, developed from a shanty town adjacent to Tilbury Docks in the 1880s • Abundance of post-war housing that has overlain the marsh landscape and the use of mass produced and non-place specific materials means the area does not have a strong sense of place
Recreational	• Footpaths are limited to pavements with minimal pedestrian connections with the wider countryside beyond • Amenity grassland interspersed with trees • Proposed Grays-Tilbury Station-Tilbury Fort Green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	• Civic square and Victorian buildings adjacent to the docks contribute to visual interest and scenic quality • Highway junction with little visual amenity and so provide a low-key sense of arrival to the settlement • Presence of open spaces and historic buildings adjacent to the docks contribute to visual interest and scenic quality while the mass-produced materials and poor condition in places detract from scenic quality
Perceptual (wildness and tranquility)	• Busy A126 and Feenan Highway contrast with quieter areas in residential areas off the main roads and away from the docks • Open marshland landscape forms a setting on most sides • Docks provide a strong industrial setting in the south-west
Functional	• Residential



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There are no landscape designations that cover LCA G3: Tilbury. This LCA comprises the post-war settlement of Tilbury. Adjacent to the docks lie some Victorian buildings and some open spaces. Green spaces are typically amenity grassland interspersed with trees and footpaths are limited to pavements. Road infrastructure disrupts the sense of tranquillity, and the area has an industrial setting.

The value attached to LCA G3: Tilbury is **low**.

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3.14.3 Susceptibility and sensitivity to change

Table 34 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 34: LCA G3: Tilbury - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Low	Although the developed nature and relative lack of time depth reduce susceptibility to development, the openness of the landscape and its setting increase susceptibility. Overall, this area has low susceptibility to this scale of development.	Low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	Development of this scale is very unlikely to cause a notable change to the character of the area given its urban-industrial setting. Susceptibility to this scale of development is very low.	Very low
Flats (5-10 storeys in height)	Medium	Although the urban and residential nature of this character area reduces susceptibility to flats, the generally low height of development and sense of openness mean that overall, this area has medium susceptibility to flats.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	High	Development of this type is likely to have a notable impact on the character of this urban residential area, although the adjacency of large-scale industrial activity to the area may reduce susceptibility. Susceptibility to this type of development is high.	Medium
Lorry parks (3.5-8 Ha)	High	Although the built-up nature of this marshland area reduces susceptibility to lorry parks, the human scale, residential nature and sense of openness increase susceptibility. Overall, the area has high susceptibility to lorry parks.	Medium

3.15 LCA G4: London Gateway Port

3.15.1 Overview

The London Gateway Port is located at the eastern end of Thurrock on the banks of the River Thames south of Fobbing and Corringham. The extent of the area is defined by the developed area and the A1014 forms part of the northern boundary. The undeveloped marshland landscape of LCA F4: Fobbing Marshes & Haven Creek wraps around the northern, eastern and western edges. The southern extent adjoins the River Thames at LCA L2: Gravesend Reach to Sea Reach. Open undeveloped marshes in Medway are located on the opposite side of the river.

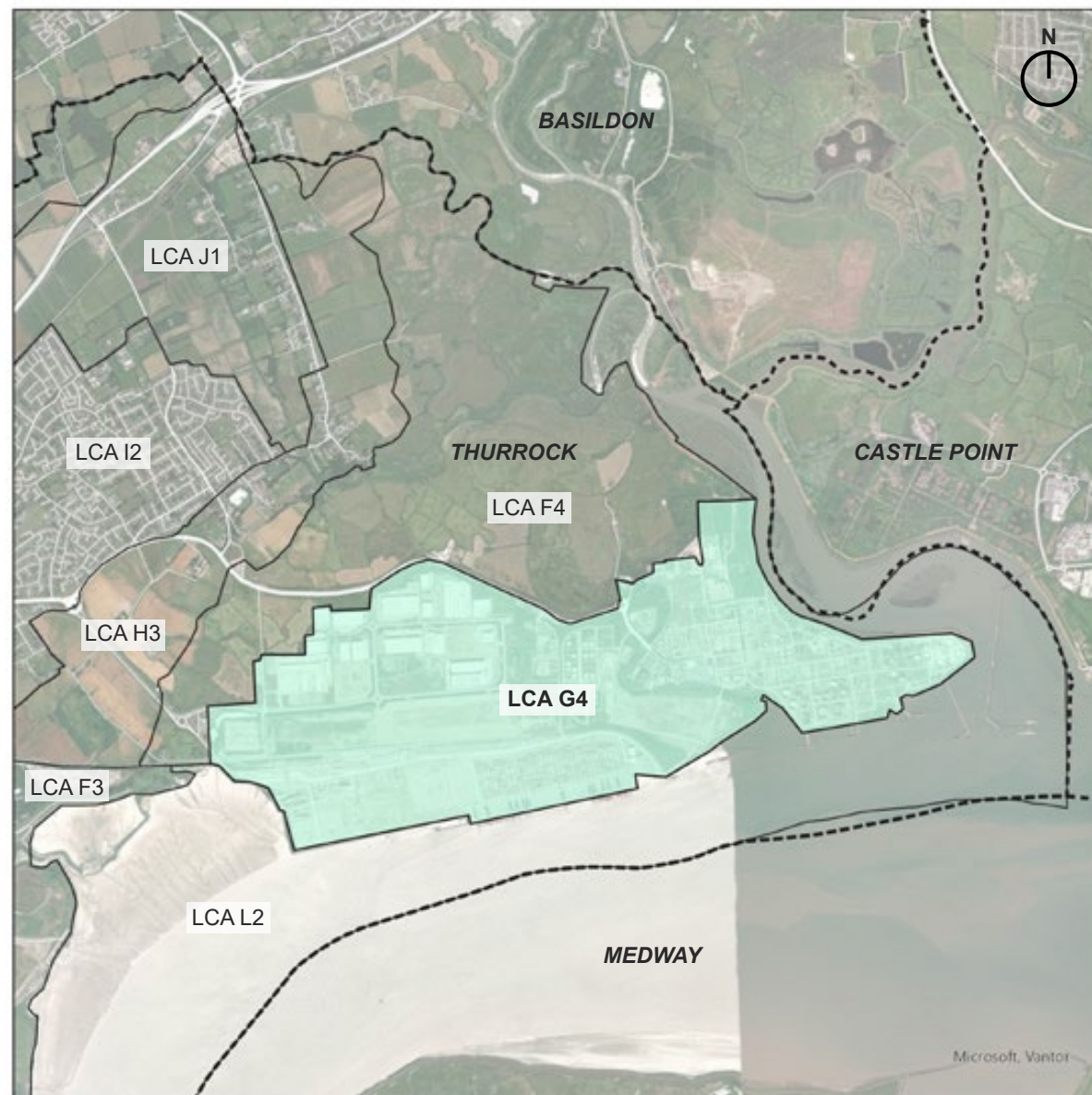


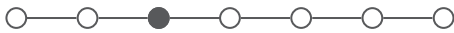
Figure 18: LCA G4: London Gateway Port

3.15.2 Landscape value

Table 35 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA G4: London Gateway Port.

Table 35: LCA G4: London Gateway Port - Landscape value

FACTOR	EVIDENCE
Relevant designations	Local Wildlife Site
Natural heritage	- Small areas of deciduous woodland and reed beds, particularly along Shell haven Creek which meanders through the area - Reed bed in the north is associated with Manorway Fleet and is designated as a Local Wildlife Site - Areas of greenspace do occur between the industrial structures including Shell Haven Creek which retains remnant marsh characteristics and connects with Fobbing Marshes beyond to the north
Cultural heritage	None of note
Landscape condition	- Area in flux with the development of the London Gateway expansion development comprising a new deep-water port and a large logistics park, and redevelopment of the former refinery site - Rest of the area has been artificially drained - Landscape appears in a state of flux with scrubby roadside vegetation and the presence of construction traffic in the area
Associations	Major petroleum production and storage area in the past
Distinctiveness	- Overwhelmingly industrial landscape of reclaimed land - Portside cranes form distinctive local landmarks - Shell Haven was once a hive for industrial activity with oil tanks dominating the landscape and providing a strong sense of place
Recreational	Area is private land and has poor connections with the wider landscape - there is no public access in and around the London Gateway Port and no public access to or along the river
Perceptual (Scenic)	- Dominated by industrial buildings and structures associated with the refining, storage and distribution of oil as well as a large commercial warehouses and port facilities - The industrial nature and variable condition of elements results in an area of relatively low scenic quality
Perceptual (wildness and tranquility)	- Open and undeveloped marshland which gives the area a sense of remoteness - River Thames provides a riverside setting to the south while the Fobbing Marshes provide an open and undeveloped marshland setting to the north - Busy landscape, albeit with a sense of remoteness
Functional	London Gateway port development and the former Coryton Oil Refinery site, which has been cleared to facilitate other new large-scale industrial/commercial premises



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There are no landscape designations that cover LCA G4: London Gateway Port. This LCA is dominated by buildings and infrastructure associated with London Gateway, which have been constructed since 2010. Small, sparse natural spaces exist, primarily along Shell Haven creek, home to patches of deciduous woodland and reed beds (including one Local Wildlife Site designation). The area is a secure international port and commercial logistics park with no public access. Some private views exist across the River Thames to the south.

The value attached to LCA G4: London Gateway Port is **very low**.

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3.15.3 Susceptibility and sensitivity to change

Table 36 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 36: LCA G4: London Gateway Port - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Large housing area (1000-2999 dwellings / 33-100 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Low	This area is almost entirely dedicated to large-scale industrial activity; there is unlikely to be any notable change due to the addition of this type of development, although some change may be perceived due to the current absence of housing in the area. Susceptibility to this scale of development is low.	Very low
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very low	The man-altered and industrial nature of this marshland area, combined with the relatively poor condition and lack of sense of place reduce susceptibility to a redevelopment scheme of this size – in fact redevelopment could create opportunities to improve condition and sense of place and improve linkages to the riverside. The naturalistic marshland areas are more susceptible to change and any development would have to preserve these more naturalistic areas and the historic St Clement’s Church and its churchyard. Overall, this area has very low susceptibility to urban development of this scale.	Very low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	The man-altered and industrial nature of this marshland area, combined with the relatively poor condition and lack of sense of place, reduce susceptibility to a housing scheme this size – a greater consideration is how existing industry would impact on amenity of residents if a small housing scheme were to be introduced. The naturalistic marshland areas are more susceptible to change as is the area around the historic St Clement’s Church and its churchyard. Overall, the area has very low susceptibility to a housing development of this scale.	Very low
Flats (5-10 storeys in height)	Low	Although the man-altered and industrial nature , the relatively poor condition and the lack of sense of place reduce susceptibility to flats, the open character increases susceptibility. Overall, this area has low susceptibility to flats.	Very low

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DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very low	The area is almost entirely dedicated to large-scale industrial activity; this type of development is very unlikely to lead to notable change. Susceptibility to this scale of development is very low.	Very low
Lorry parks (3.5-8 Ha)	Very low	The man-altered, industrial nature and large scale of this marshland area, combined with the relatively poor condition and existing presence of a lorry park, means the area has very low susceptibility to lorry parks, particularly on brownfield sites. The naturalistic marshland areas and locations close to the historic St Clement's Church and its churchyard are more susceptible to this type of development.	Very low

3.16 LCA H1: East and West Tilbury

3.16.1 Overview

This LCA forms a broad swathe of farmland between the large settlements of Chadwell St Mary and Stanford-le-Hope / Corringham. It is an undulating semi-rural landscape with localised hills, enabling expansive views to the surrounding landscape. Settlement includes the small settlements of East Tilbury and Linford and the smaller villages of Orsett Heath, Orsett Cock, West Tilbury and East Tilbury old village, as well as dispersed farmsteads.

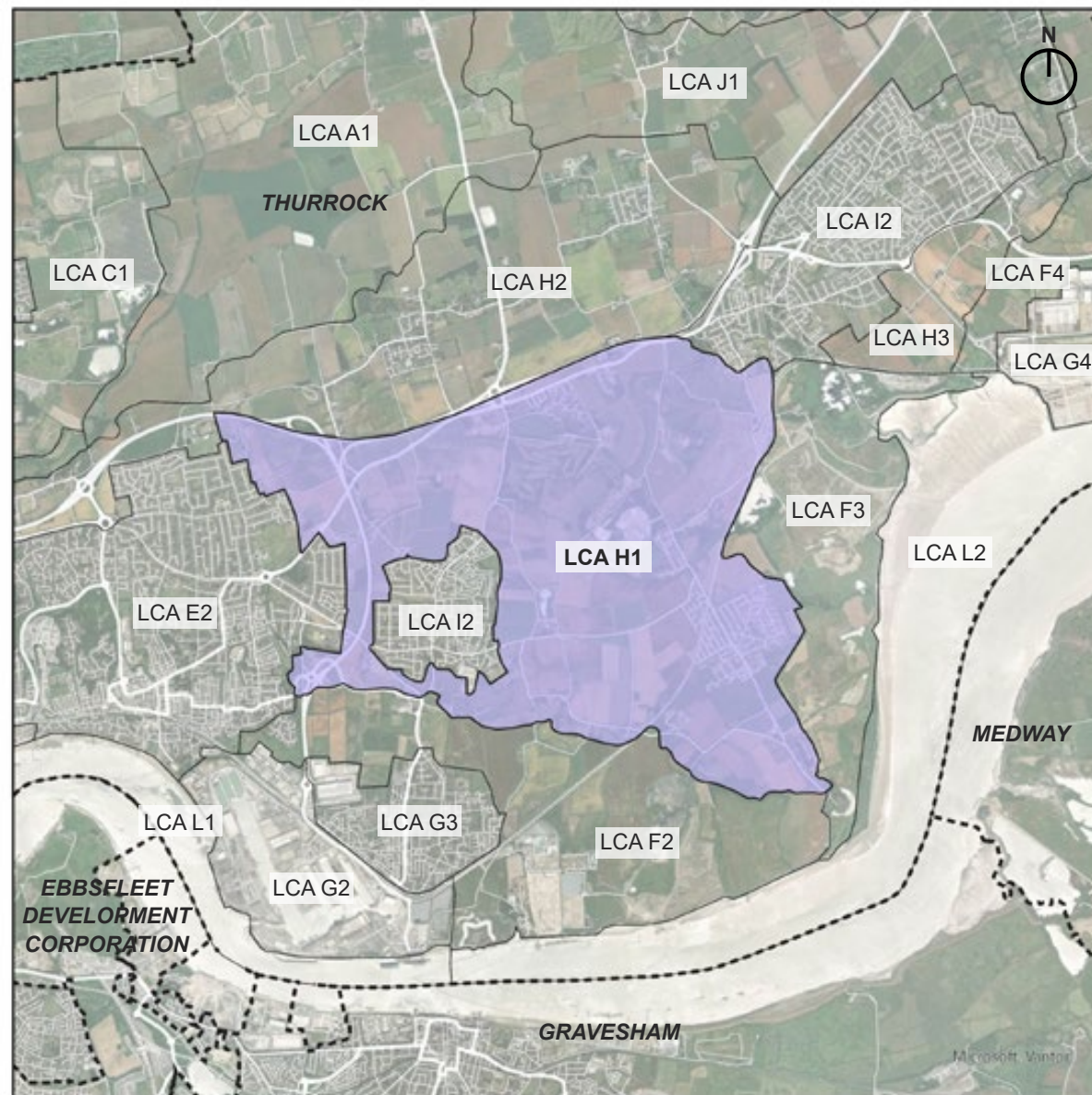


Figure 19: LCA H1: East and West Tilbury

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.16.2 Landscape value

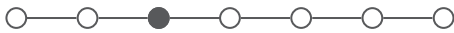
Table 37 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA H1: East and West Tilbury.

Table 37: LCA H1: East and West Tilbury - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Linford Wood Local Nature Reserve • Local Wildlife Sites
Natural heritage	• Occasional small copses (hawthorn, elm, field maple and ash) as a result of the generally well drained, coarse and loamy soils over gravel • Remnant Thames Terrace grasslands (semi-natural or unimproved grassland sites, now a scarce habitat (Local Wildlife Site) • Hedgerows along historic lanes and tracks • Limited tree cover, primarily due to the loss of elm hedgerows and historic land uses • Linford Wood (to the east of Linford), comprising a mix of Hawthorn scrub, Elm scrub woodland, an old willow plantation and a small area of maturing Pedunculate Oak, represents one of the few woods and is part of a Local Nature Reserve • There is a small ancient woodland fragment at Rainbow Shaw which is designated as a Local Wildlife Site • Areas comprising a mosaic of unimproved acid grassland, exposed substrates and other habitat features, such as scrub and wetland features, have developed on disturbed land at Buckingham Hill, Mucking Heath and Orsett Camp Quarry (now of biodiversity interest and designated as Local Wildlife Sites)
Cultural heritage	• Conservation Areas • Scheduled Monuments: two batteries close to Coalhouse Fort, earthworks related to a Neolithic causewayed enclosure and an Anglo-Saxon barrow cemetery, some earthworks by West Tilbury Church that are designated as a scheduled monument, and several listed buildings • Occasional areas of historic field patterns, common land, historic lanes and tracks (e.g. Hornsby Lane between Orsett Heath and Orsett) and medieval earthworks • Remnants of an historic settlement pattern of small villages within a wider agricultural landscape (most notably the medieval agricultural village of West Tilbury which has survived more or less intact and is designated a Conservation Area) • Pockets of pre-18th century enclosure (one along Butts Lane and one just north of Orsett Heath) and Medieval common land remains in the vicinity of West Tilbury, including the village green itself and a Medieval 'open field' system in the area of The Great Common Field bounded by Rectory Road, Turnpike Lane, Blue Anchor Lane and Muckingford Road (now part of West Tilbury Conservation Area)
Landscape condition	• Semi-rural and open character, as a result of regular-large sized agricultural fields bounded by gappy hedgerows and relatively few trees (much lost post 1950, including due to Dutch Elm disease) • Relatively good (Grade 2) agricultural soils • Much of the landscape has been changed since the 1950s • There has been field boundary loss since the 1950s and this, combined with the previous loss of elm, has resulted in a landscape with relatively little tree cover • Mineral workings and landfill sites have altered landform and cover

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FACTOR	EVIDENCE
Associations	Queen Elizabeth I's speech before the Armada is reputed to have been delivered at West Tilbury
Distinctiveness	- Undulating semi-rural landscape with localised hills, enabling expansive views to the surrounding landscape - Large villages of East Tilbury and Linford and the smaller villages of Orsett Heath, Orsett Cock, West Tilbury and East Tilbury old village - Scarp supports defensive military sites e.g. the gun batteries at Bowater's Farm and East Tilbury Village - Mineral extraction sites (active and restored) are noticeable features of the landscape - Remnants of a historic settlement pattern of villages linked by a network of minor roads and lanes lined by hedgerows - Built form typically includes a mixture of pre-17th century timber framed buildings and later buildings in brick (red, yellow stock or grey gault) with lime washed render or weather boarded cladding - East Tilbury is, however, a modern planned town, with low-density housing, a heavily landscaped setting, and separation of manufacturing and residential areas, a civic core and pattern of streets that avoided monotony 1930s BATA factory (designed by the Czech architects, Vladimir Karfik and Frantizek Gahura) and the adjoining distinctive 'garden village' at East Tilbury provide a distinctive feature of the area
Recreational	- Leisure (golf courses) - Proposed Grays-Chadwell St Mary-Stanford-le-Hope green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	- Panoramic views from high points, across the neighbouring marshes and the Thames estuary as a result of the relatively elevated landform - Landscape provides a rural setting to Chadwell St Mary and Stanford-le-Hope as well as a rural backdrop to the adjacent marshes - Noticeable urban influences such as pylons, gravel extraction operations, industrial development and modern residential development - Rural landscape has limited scenic qualities relating to the gentle undulations and patchwork of fields, within which historic villages form focal features. However, pylons and modern 'suburban' development detract from scenic quality - Good views over the marshes from the southern escarpment, for example from Turnpike Lane) - Sense of openness as a result of the large, open arable fields and previous loss of elm and hedgerows - Skylines are often punctuated by buildings or pylons. The skyline of the southern escarpment is generally undeveloped (except for some anomalies on the southern edge of Chadwell St Mary) and provides a visually prominent backdrop to the adjacent marshes - Open agricultural fields and historic dimension to the landscape at Orsett Heath (including the Scheduled cropmarks to the north and south of the A13) are important to the setting of Grays urban area
Perceptual (wildness and tranquility)	- Landscape with moderate sense of tranquillity / rurality – although this is a predominantly rural agricultural landscape, it is influenced by nearby built form and industry in adjacent areas as well as transport corridors and pylons in this area - The A13 fragments the landscape and pylons have reduced the rural character of the landscape
Functional	- Productive agricultural land (arable and pasture) - Area forms a rural setting to Chadwell St Mary and Stanford-le-Hope as well as a rural backdrop to the adjacent marshes



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There are no landscape designations that cover LCA H1: East & West Tilbury. The LCA primarily comprises productive agricultural land and sits between a few settlements. The undulating, mildly elevated topography provides panoramic views across marshland and the estuary. Its character provides some degree of tranquillity and includes several small villages, which are home to some pre-17th century buildings. However, some road infrastructure and new developments have disrupted the rurality of the LCA. The LCA contains a few priority habitats, the Linford Wood Local Nature Reserve and some Local Wildlife Sites and a large number of features with historical value, including several Scheduled Monuments.

The value attached to LCA H1: East & West Tilbury is **medium**.

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3.16.3 Susceptibility and sensitivity to change

Table 38 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 38: LCA H1: East and West Tilbury - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open and rural character of this area means that a new settlement of this size could take up a substantial part of the LCA and erode the rural character of the area. Susceptibility to a very large housing area is very high.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	High	The open and rural character of this area means that a new settlement of this size would be a notable introduction to the landscape. Susceptibility to a large housing area is high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	High	The open and rural character of this area means that another new settlement of this size would be a notable introduction to the landscape. Susceptibility to a substantial housing area is high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Medium	The open and rural character of this area means that another settlement of this size would be a notable introduction to the landscape. Susceptibility to a small housing area is medium.	Medium
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	The open and rural character of this area means that minor housing in this rural area would be a notable addition to the landscape. Susceptibility to a minor housing area is medium.	Medium
Flats (5-10 storeys in height)	Very high	The rural character and historic character of the villages means that buildings of this scale would be a notable and distinct addition in this landscape. This area has a very high susceptibility to flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	High	Development of this type is likely to have a notable impact on the character of the area due to its rural and historic character, although the presence of large-scale industrial activity within the area may reduce susceptibility. Susceptibility to this type of development is high.	High
Lorry parks (3.5-8 Ha)	High	Development of this type is likely to have a notable impact on the character of the area due to its rural and historic character, although the presence of large-scale industrial activity within the area may reduce susceptibility. Susceptibility to this type of development is high.	High

3.17 LCA H2: Orsett and Horndon-on-the-Hill

3.17.1 Overview

The Orsett and Horndon-on-the-Hill LCA covers the rural landscape to the north of the A13 including the villages of Orsett, Horndon-on-the-Hill and North Stifford. Its southern boundary is formed by the A13, with LCA H1: East & West Tilbury situated beyond. The northern boundary is characterised by a gradual transition to LCA A1: Bulphan Fenland to the north and the Langdon Hills to the north-east.

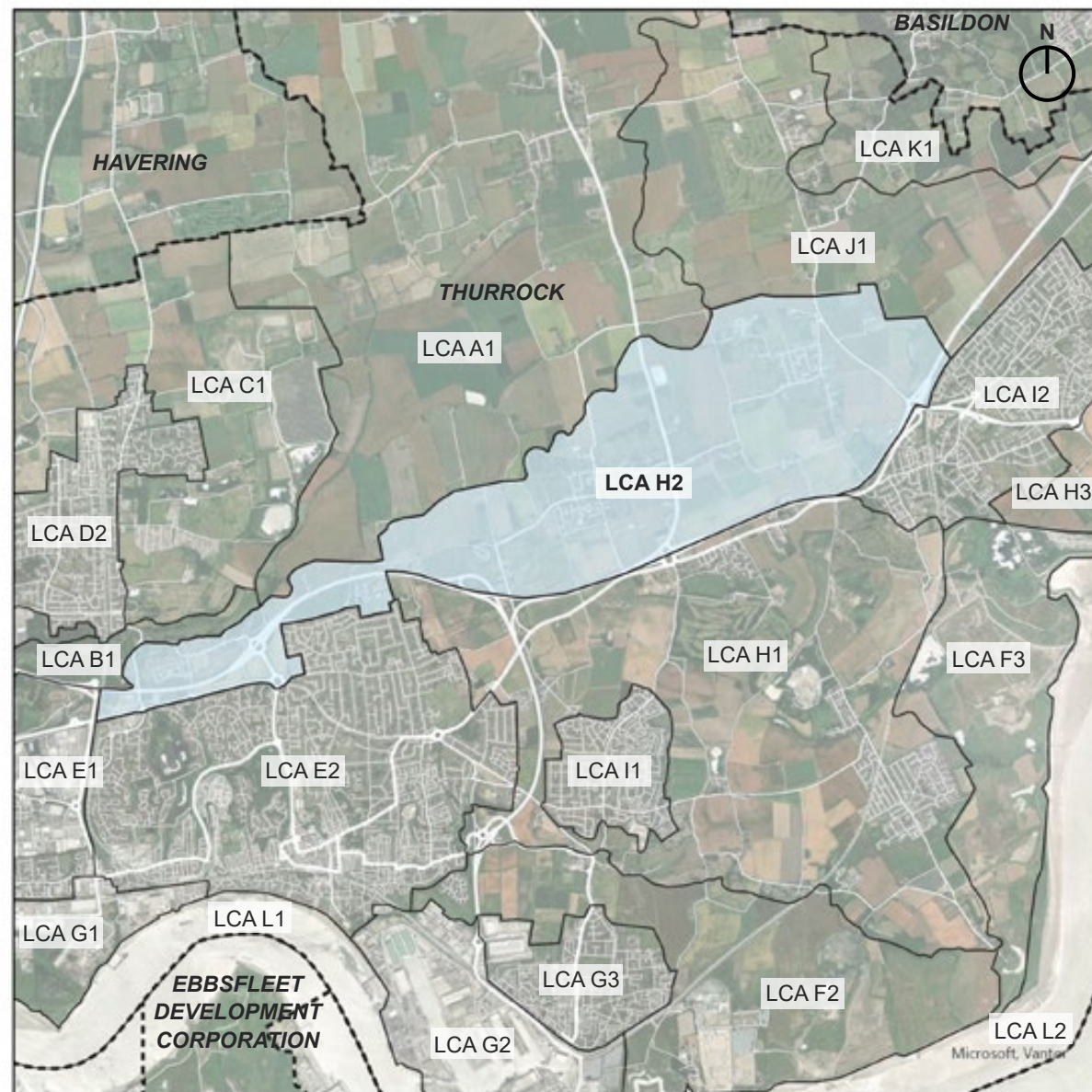


Figure 20: LCA H2: Orsett and Horndon-on-the-Hill

3.17.2 Landscape value

Table 39 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA H2: Orsett and Horndon-on-the-Hill

Table 39: LCA H2: Orsett and Horndon-on-the-Hill - Landscape value

FACTOR	EVIDENCE
Relevant designations	Thames Chase Community Forest
Natural heritage	- Small, rectilinear blocks of deciduous woodland typically associated with coverts and historic orchards contribute important elements to an otherwise open farmed landscape and provide historic and biodiversity interest - Although most of this area is farmed, there are a number of deciduous woodland coverts on the slopes around Orsett which are Priority Habitats
Cultural heritage	- Settlement pattern reflects the considerable time depth of this area, with the agricultural villages of Orsett and Horndon-on-the-Hill and a dispersed pattern of moated sites and barns of the 15th to 18th centuries still apparent - Orsett is also home to Bishop Bonner's Palace (a ring and bailey earthwork) and the Springfield style enclosure and Iron Age enclosures south of Hill House, Baker Street, both designated as Scheduled Monuments - South of Hill House, Baker Street, both designated as Scheduled Monuments. An extensive cropmark complex west of Baker Street (also partly within LCA H1: East & West Tilbury to the south), is also designated a Scheduled Monument. These cropmarks represent multi- period settlement from at least the Bronze Age to the medieval period - Historic cores of Orsett and Horndon-on-the-Hill are Conservation Areas and contain a high concentration of Listed Buildings. - Extensive cropmarks
Landscape condition	Good agricultural land with a network of mature hedgerows and hedgerow trees creating relatively strong landscape structure
Associations	- Orsett was the original seat of local government for the area and the site of a palace of the Bishop of London in medieval times - Horndon-on-the-Hill had a Royal Mint from the 11th century, gaining proto-urban status
Distinctiveness	- Rural character influenced by agricultural fields surrounding small historic hamlets and a dispersed pattern of farmsteads connected by rural lanes - Settlement pattern of scattered historic halls and farmsteads located along minor roads and historic rural villages of Orsett (a nucleated fen edge settlement) and Horndon-on-the-Hill (a compact hilltop settlement) - Strong historic landscape pattern of ancient rectilinear fields with hedgerows, historic lanes and roads - Strong local built vernacular including medieval timber frame buildings and post medieval buildings rendered in plaster and lime wash, red brick and white and black weatherboarding
Recreational	Small number of recreational areas comprising sports pitches relating to the settlements of Orsett and Horndon-on-the-Hill

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FACTOR	EVIDENCE
Perceptual (Scenic)	• Elevated nature of the landscape allows for expansive views north across the fen landscape beyond • Skyline of Horndon-on-the-Hill is particularly prominent and distinctive, with an attractive wooded skyline and the church spire forming a focal point • Relatively high scenic quality as a result of the undulating topography, areas of woodland, historic farmsteads, halls and villages and backdrop provided by the Langdon Hills • Gently undulating topography and areas of woodland contribute to the scenic quality, but it is the historic farmsteads, halls and villages which create the greatest visual interest, resulting in a landscape of high scenic quality. Detractors include pylons and roads • Views from the south side of Horndon Hill across Stanford-le-Hope/ Corringham and the Thames Estuary to the hills on the south side of the estuary • Skyline of Horndon-on-the-Hill is particularly prominent and distinctive, with an attractive wooded skyline and the church spire on the highest part of the hill forming a focal point. The Langdon hills form an attractive rural backdrop to the north of the area
Perceptual (wildness and tranquility)	• Rural feel enhanced by the strong relationship of the unspoilt historic villages with their agricultural surroundings. A strong sense of history in the historic buildings, mature trees and woodlands and remnants of parkland landscapes, such as in the use of Scots pine, specimen trees and railings, provides interest and richness. A number of historic tracks and roads cross through the area
Functional	• Mixed arable and pasture fields are the prevalent land uses in the area • Character of the area is particularly important in contrast to the urban conurbation of Grays/ Lakeside to the south

There are no landscape designations that cover LCA H2: Orsett and Horndon-on-the-Hill. This LCA is dominated by productive agriculture in a remnant, irregular field pattern well-defined by mature hedgerows. Small, historic villages are interspersed amongst the fields, containing buildings with historical value, many with external timber frames. Together, these typologies create a notable sense of place and rural character. Several patches of deciduous woodland are located within the LCA. There are several expansive views available due to the undulating topography, with distinctive backdrops of visual interest. The A13 passes along the southern boundary and partly through the LCA.

The value attached to LCA H2: Orsett and Horndon-on-the-Hill is **medium**.

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3.17.3 Susceptibility and sensitivity to change

Table 40 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 40: LCA H2: Orsett and Horndon-on-the-Hill - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size could take up a substantial part of the LCA and erode the rural character of the area. Susceptibility to a very large housing area is very high.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would be a notable introduction to the landscape. Susceptibility to a large housing area is very high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The rural character and size of this area means that another settlement of this size would be a notable introduction to the landscape. Susceptibility to a substantial housing area is very high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	High	Although the open and rural character of this area increases susceptibility to a small housing development, the modern field pattern and presence of existing development nearby decreases susceptibility. Overall, the area has high susceptibility to a new housing development of this size.	High
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	Although the open and rural character of this area increases susceptibility to a small housing development, the modern field pattern and presence of existing development nearby decrease susceptibility. Overall, the area has medium susceptibility to housing of this size.	Medium
Flats (5-10 storeys in height)	Very high	The rural character and historic character of the villages means that buildings of this scale would be a notable and distinct addition to this landscape. This area has very high susceptibility to flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The relative sense of rurality and historic settlement character means this landscape has a very high susceptibility to major warehouse development.	High
Lorry parks (3.5-8 Ha)	Very high	The relatively open character, relative sense of rurality and historic settlement pattern mean that this area has a very high susceptibility to lorry parks, due to the many vehicle movements and floodlights.	High

3.18 LCA H3: Fobbing Ridge

3.18.1 Overview

The Fobbing Ridge Landscape Character Area forms a relatively narrow swathe of agricultural land between the urban area of Stanford-le-Hope/Corringham and the Thames-side marshes. It includes part of the village of Fobbing. The boundary with LCA I2: Stanford-le-Hope & Corringham is defined by the edge of the urban area and the A1014. The boundary with LCA F3: Mucking Marshes is delineated by a railway whilst the transition with LCA F4: Fobbing Marshes & Haven Creek is less defined, roughly following the 5m contour line. The boundary with LCA J1: Langdon Lower Hill Slopes is clearly defined by the road that leads to Fobbing.

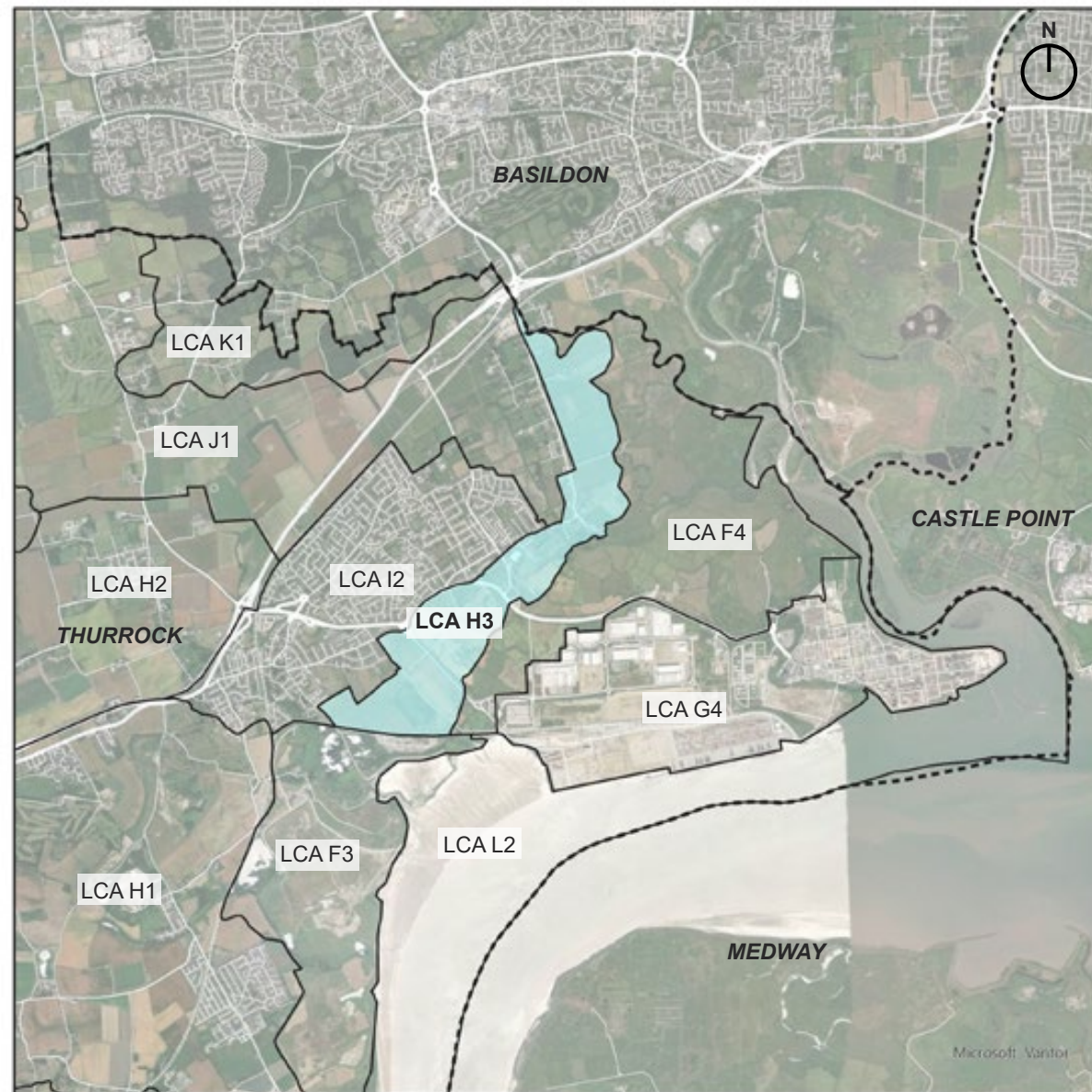


Figure 21: LCA H3: Fobbing Ridge

3.18.2 Landscape value

Table 41 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA H3: Fobbing Ridge.

Table 41: LCA H3: Fobbing Ridge - Landscape value

FACTOR	EVIDENCE
Relevant designations	• None
Natural heritage	• Areas of woodland and trees provide shelter around farmsteads and villages; small areas of broadleaved deciduous woodland on the edge of Corringham are areas of local nature conservation significance • Low-lying fields support areas of lowland wet grassland • Small areas of woodland and stands of trees are concentrated around properties; couple of areas of broadleaved deciduous woodland situated on the edge of Corringham
Cultural heritage	• Fobbing is a key feature at the end of the ridge and with a past as a thriving port and historic association with the smuggling trade and being one of the main villages involved with the Peasants’ Revolt in the 14th century • Fobbing was a relatively large medieval settlement due to the river bringing in a lot of trade into the village. The historic core still makes up a considerable part of Fobbing with only piecemeal development occurring over the last few centuries. More recent regeneration has tried to incorporate this within older properties which create a sense of history. Corringham was also an important medieval settlement on the marshland edge • Fobbing was a busy port in the medieval times, utilising the marshland grazing, fishing and trading opportunities provided by the Thames estuary
Landscape condition	• Landscape that was once made up of smaller pre-18th century enclosures changed into an area of large-scale farmland fields – most hedgerow loss occurred post 1950s • Large-scale arable fields with denuded hedgerows
Associations	• No known associations
Distinctiveness	• Small valley between Fobbing and Corringham contains smaller fields of pasture and thicker hedgerows, providing a scenic rural and green setting to the historic villages of Corringham and Fobbing • Scattered isolated historic halls, farmsteads and historic villages • Strong local built vernacular, particularly associated with the historic halls and villages, including timber framed pre-17th century buildings, and later buildings in brick (red, yellow stock or grey gault) with lime washed render or weather boarded cladding • Historic barns are typically timber framed with thatched or tiled roofs and horizontal weatherboard walls, typically white or black • Modern settlement of Corringham, which is located mostly in the adjacent character area, has a suburbanising influence due to the style of houses and presence of leisure and recreational land uses on its edge • Medieval core of Fobbing still forms the focus for much of the village today • Timber frame buildings of Fobbing and Corringham date back to the medieval era although the exterior of a lot of these have been subject to alterations since the 17th century • St Michael’s Church in Fobbing forming a distinct landmark

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FACTOR	EVIDENCE
Recreational	- Leisure and recreational land uses close to the urban area - Proposed Coalhouse Fort to London Gateway green link, from the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) map
Perceptual (Scenic)	- Bounded by denuded hedgerows and drainage ditches create an open and exposed landscape, crossed by pylons, and with long views south-east across the marshes - Fobbing occupies a high point and St Michael’s church is a landmark on the skyline; there are notable panoramic views across the Thames valley from Fobbing - Historic halls and villages are particularly scenic as a result of their strong local built vernacular and leafy settings - Modern ‘suburban’ development on the edge of Corringham and prominent pylons that cross the area detracts from scenic quality - Extensive long-distance views to the south and east across Fobbing Marshes and the Thames Estuary from this low-lying ridge at the edge of Fobbing and Corringham. This includes views of the London Gateway development on the horizon - Electricity pylons are prevalent and act as detractors in the landscape
Perceptual (wildness and tranquility)	- Ridge landform and rural character of the landscape contribute to the scenic quality of this area - Retains a sense of rurality, particularly from country lanes traversing the landscape and from in and around the village of Fobbing - Main roads dissect the landscape including the construction of the new London Gateway access road which interrupts the flow of the fieldscape
Functional	- Predominantly large-scale arable fields defined by hedgerows and interspersed with farmsteads and the historic rural village of Fobbing - Rural backdrop to the marshes and an important rural setting to Corringham and Fobbing

There are no landscape designations that cover LCA H3: Fobbing Ridge. This LCA is characterised predominantly by large-scale arable fields. The historic village of Fobbing also lies in the LCA as well as some farmsteads. Fobbing itself has some historical value, with some buildings of visual interest. Some small areas of woodland and wet grassland exist in the LCA and a few recreational features. Modern suburban development and road infrastructure compromise the otherwise tranquil and rural character of the LCA.

The value attached to LCA H3: Fobbing Ridge is **medium**.

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3.18.3 Susceptibility and sensitivity to change

Table 42 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 42: LCA H3: Fobbing Ridge - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would take up a substantial part of the LCA and erode the rural character of the area. Susceptibility to a very large housing area is very high.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would be a notable introduction to the landscape. Susceptibility to a large housing area is very high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The rural character and size of this area means that another settlement of this size would be a notable introduction to the landscape. Susceptibility to a substantial housing area is very high.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	High	Although the open and rural character of this area increases susceptibility to a small housing development, the modern field pattern and presence of existing development nearby decreases susceptibility. Overall, the has high susceptibility to a new housing development of this size.	High
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	Although the open and rural character of this area increases susceptibility to a small housing development, the modern field pattern and presence of existing development nearby decrease susceptibility. Overall, the area has medium susceptibility to housing of this size.	Medium
Flats (5-10 storeys in height)	Very high	The rural character and historic character of the villages means that buildings of this scale would be a notable and distinct addition to the landscape. This area has very high susceptibility to flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The relative sense of rurality and historic settlement character means this landscape has high susceptibility to major warehouse development.	High
Lorry parks (3.5-8 Ha)	Very high	The relatively open character, relative sense of rurality and historic settlement pattern mean that this area has a very high susceptibility to lorry parks, due to the many vehicle movements and floodlights.	High

3.19 LCA I1: Chadwell St Mary

3.19.1 Overview

Chadwell St Mary is a post-war settlement which expanded from the medieval village of Chadwell. The historic core of Chadwell St Mary lies at its southern end, around the crossroads of Linford Road/ Chadwell Hill and a few listed buildings survive from the historic roadside settlement. The elevated situation of Chadwell at the top of a low ridge (30m AOD) delivers long views to the south over the Tilbury Marshes and River Thames from intermittent vantage points in the south of the town, creating a strong relationship with the adjacent landscape.

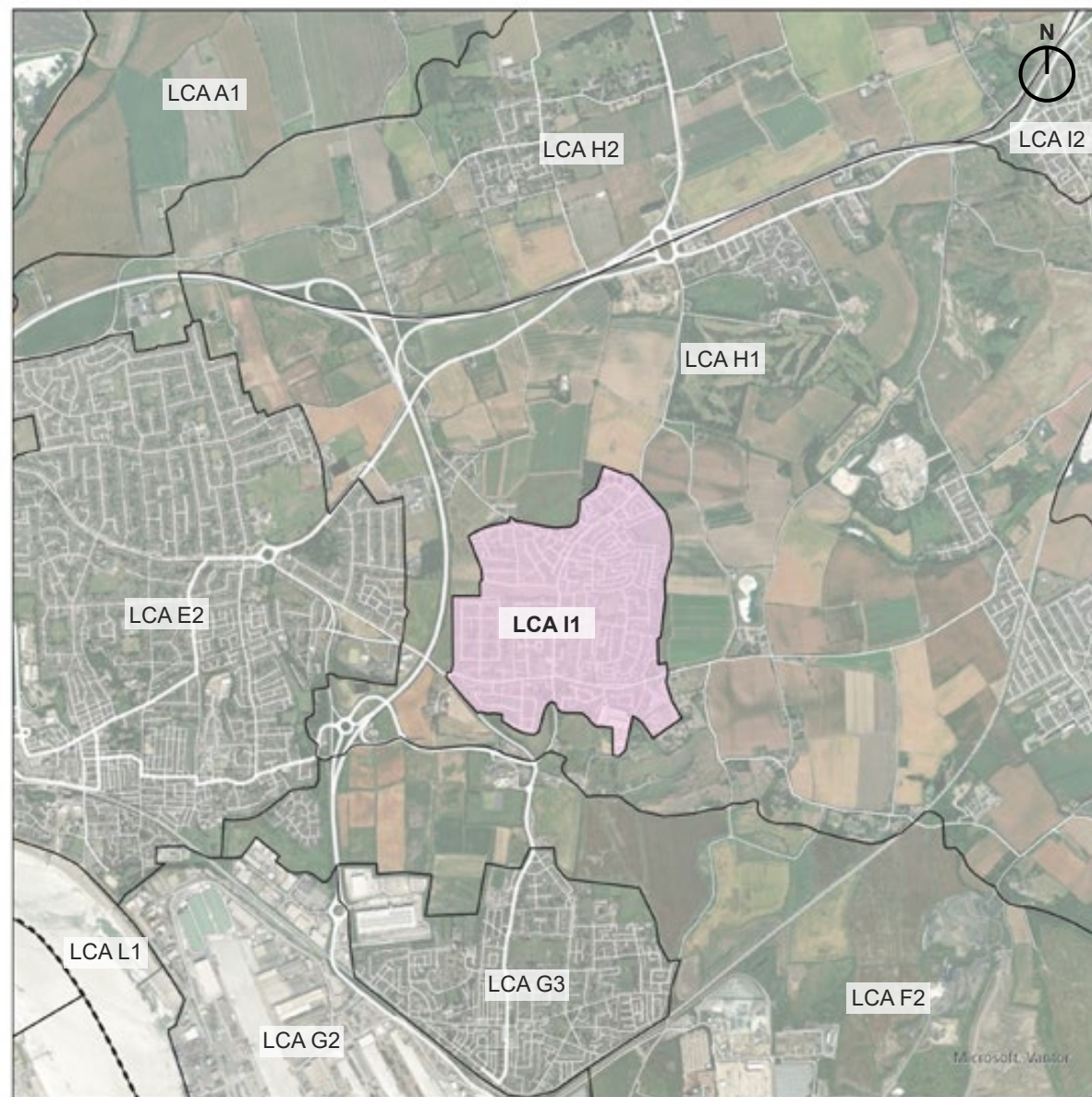


Figure 22: LCA I1: Chadwell St Mary

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3.19.2 Landscape value

Table 43 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA I1: Chadwell St Mary.

Table 43: LCA I1: Chadwell St Mary - Landscape value

FACTOR	EVIDENCE
Relevant designations	• None
Natural heritage	• Areas of green space within the town interspersed with the built development • Open spaces form a notable green wedge, stretching into the centre of the settlement from the west • Relatively large areas of green open space which spread through the centre of the town – most are recreation grounds or amenity grassland with some planting and trees but generally with limited biodiversity value • Naturalistic spaces including the cemetery provide some natural interest and biodiversity value. There are frequent green spaces alongside roads and around buildings, providing the sense of a more ‘suburban’ character than the more urban settlements of Grays and Thurrock to the west • Green spaces are generally rather ‘flat’ with some planting and trees but also large areas of mown grass with limited visual interest
Cultural heritage	• A few listed buildings survive from the historic roadside settlement • Grade I listed Church of St Mary forms an important landmark feature at the crossroads in the historic core of Chadwell St Mary • Historic and listed buildings (such as Sleepers Farmhouse on the corner of Chadwell Hill/ River View) are important in maintaining the historic character of the town
Landscape condition	• Steady decline in the condition of the historic core as well as other parts of the settlement
Associations	• World javelin champion, Fatima Whitbread, grew up in Chadwell St Mary after being adopted by the Whitbread family when she was thirteen
Distinctiveness	• Post-war settlement which expanded from the medieval village of Chadwell • Historic core at the crossroads and the Church of St Mary provides a strong focus, the character of which is enhanced by historic buildings of red brick and thatched roofs • Landscape setting to the town, both at its edges and the wedges of green space that protrude into the centre of the settlement are important in creating a sense of identity which is distinct from the larger towns • Traditional buildings contribute positively, including Chadwell House, The Cross Keys PH, Sleeper’s Farm at the top of Chadwell Hill and the Spar shop front • Weak sense of place as a result of standardised and utilitarian materials
Recreational	• Relatively large areas of green open space which spread through the centre of the town – most are recreation grounds or amenity grassland, but they lack facilities such as equipment or pitches • Proposed Grays-Chadwell St Mary -Stanford-le-Hope green link, from the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) map

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FACTOR	EVIDENCE
Perceptual (Scenic)	• Elevated situation of Chadwell at the top of a low ridge (30m AOD) delivers long views to the south over the Tilbury Marshes and River Thames from intermittent vantage points in the south of the town, creating a strong relationship with the adjacent landscape • The industrial estate contains industrial and commercial units at a larger scale which are poorly sited on the top of the Chadwell Ridge, creating a visual detractor • The historic core and views across the Thames floodplain from the south of the town to the south contribute to the scenic qualities of the settlement • Character of views is often monotonous as the amenity grassland and standardised building style lacks diversity and therefore reduces the sense of legibility of the area • Poor quality and decaying building facades – particularly in the local shopping parades - create a perception of poor maintenance and neglect
Perceptual (wildness and tranquility)	• Grays - Dock Approach Road is currently a major barrier to movement • Suburban town, noticeably less 'urban' than the nearby towns of Grays and West Thurrock to the west, as a result of frequent areas of green space – including public and private spaces - and the presence of local centres • Boundary between the settlement edge and surrounding countryside is often harsh, particularly to the north
Functional	• Open landscape to the west of Chadwell St Mary (between Chadwell St Mary and Little Thurrock/ Grays) is important in creating a sense of separation between Chadwell St Mary and the larger Grays conurbation

There are no landscape designations that cover LCA I1: Chadwell St Mary. This LCA consists of the predominantly post-war settlement of Chadwell St Mary. The historic core retains some buildings and features of visual interest, including a Grade I listed church, while others are decaying. Some green spaces exist, but these have a primarily amenity function rather than supporting biodiversity. Some views exist out of the LCA towards Tilbury Marshes and the River Thames, although these are monotonous. Industrial and commercial structures as well as road infrastructure contribute as detractors.

The value attached to LCA I1: Chadwell St Mary is **low**.

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3.19.3 Susceptibility and sensitivity to change

Table 44 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 44: LCA I1: Chadwell St Mary - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Low	Development of this scale in a settlement of this scale is unlikely to change the character of the area, resulting in low susceptibility to this development scenario.	Low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	Development of this scale in a settlement of this scale is very unlikely to change the character of the area, resulting in very low susceptibility to this development scenario.	Very low
Flats (5-10 storeys in height)	Medium	Development of this type would not necessarily change the character of the area, depending on its relative location within the settlement and topography. Susceptibility to this development scenario is medium.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A
Lorry parks (3.5-8 Ha)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A

3.20 LCA I2: Stanford-le-Hope and Corringham

3.20.1 Overview

The adjoining settlements of Stanford-le-Hope and Corringham have merged into one urban area. This urban area and its associated recreation grounds and allotments on the edges form the landscape character area. The northern boundary of the area follows the railway line along much of its length which forms a straight and well defined edge. Since the urban area lies within the Undulating Open Farmland landscape type, it adjoins LCA H1: East & West Tilbury to the south-west, LCA H2: Orsett & Horndon-on-the-Hill to the north-west, and LCA H3: Fobbing Ridge to the south-east. The northern edge adjoins LCA J1: Langdon Lower Hill Slopes and a small part of the southern edge of Stanford-le-Hope adjoins LCA F3: Mucking Marshes.

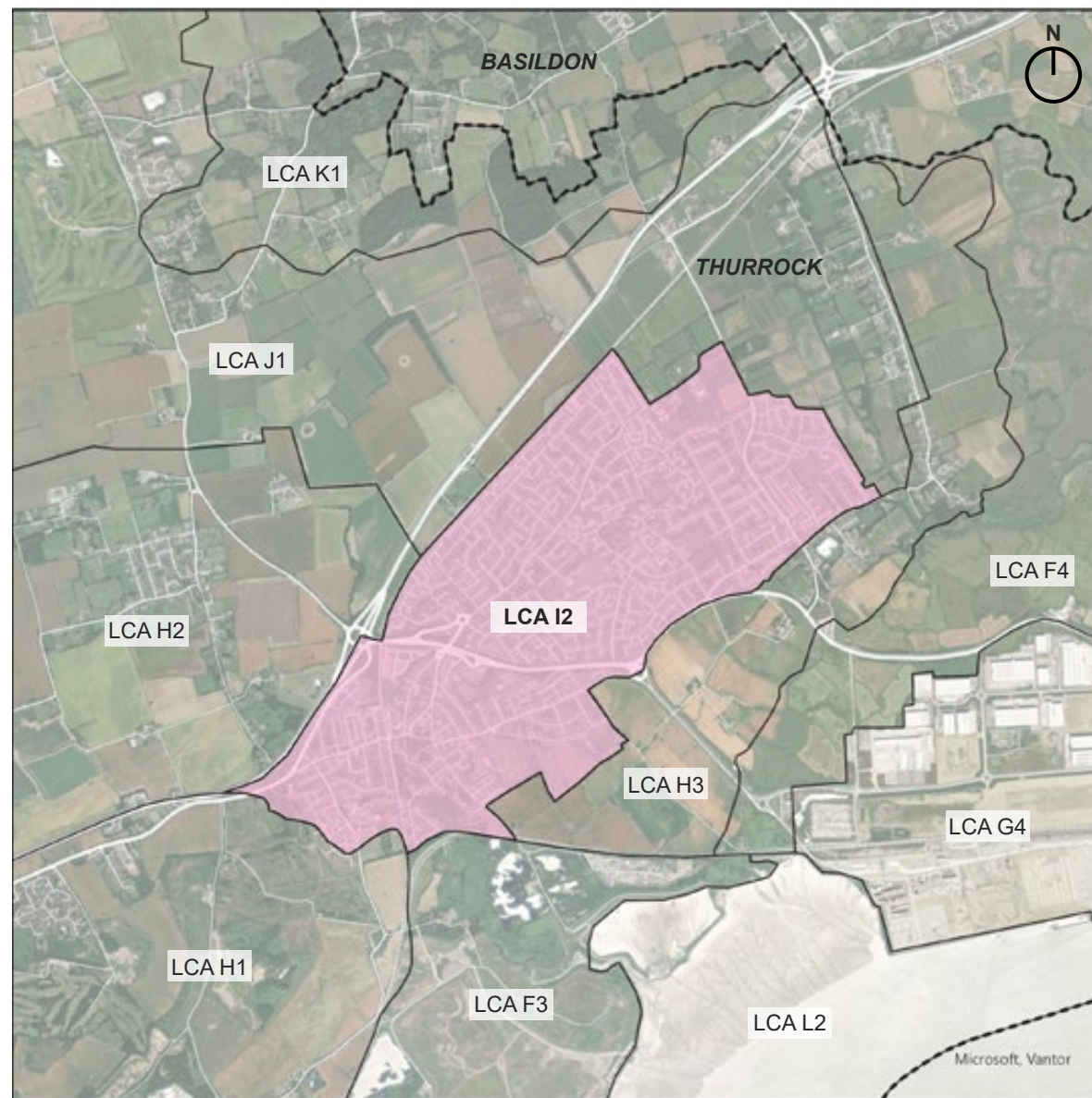


Figure 23: LCA I2: Stanford-le-Hope and Corringham

3.20.2 Landscape value

Table 45 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA I2: Stanford-le-Hope and Corringham.

Table 45: LCA I2: Stanford-le-Hope and Corringham - Landscape value

FACTOR	EVIDENCE
Relevant designations	Grove House Local Nature Reserve
Natural heritage	- Green spaces inset within the development mostly comprises amenity grassland with limited tree planting - More naturalistic habitats occur along Mucking Creek including deciduous woodland (a priority habitat), scrubby woodland and pasture (adjacent to the A1014) and swamp and wet woodland at Grove House Wood and Marsh Local Nature Reserve
Cultural heritage	Incorporates some occasional historic elements such as listed Halls which would have once sat in rural settings and have been subsumed within the urban fabric
Landscape condition	Areas that remain historically intact and in good condition include the historic core of Stanford-le-Hope, Hassingbrook Hall, the course of Mucking Creek and some of the intact Victorian streets and inter-war areas of Stanford-le-Hope. Other areas appear to be in a state of decline
Associations	- First record of Stanford-le-Hope was from entries into the Domesday Book dating back to 1086 - Joseph Conrad, the well-regarded novelist, moved to Victoria Road in Stanford-le-Hope in 1896 with his wife before later moving to Billet Lane. It was in Stanford-le-Hope where Conrad wrote many of his works including 'Karain', 'The Return' and 'Youth'
Distinctiveness	- Predominantly an inter-war and post-war settlement - Historic core is still discernible in the form of the church and the 'Inn on the Green' - Lack of reference to local styles and materials throughout the majority of the area lead to a weak sense of place; re- fabricated, mass-produced materials are prevalent throughout - St Margaret's Church provides a strong historic landmark and is the focus to the large nodal point in the centre of Stanford-le-Hope - The 1960s town centre forms a node and there are some smaller nodes marked by local parades of shops in the surrounding residential areas
Recreational	- Limited public footpaths in and around the area and so the area has poor pedestrian connections with the adjacent landscape - Proposed Grays-Chadwell St Mary -Stanford-le-Hope green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map - Proposed Corringham to Langdon Hills Country Park green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map

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FACTOR	EVIDENCE
Perceptual (Scenic)	- Well conserved local centres such as the Rainbow Stores on Corringham Road provide visual interest and contribute to the scenic quality of the townscape - The setting of the Langdon Hills to the north and Thames estuary to the south provide some scenic quality - Ridge top position allows some long-distance views, for example north wards to the Langdon Hills from central Corringham
Perceptual (wildness and tranquility)	- Presence of the railway line and major roads on the edges of the settlement - Main roads traversing the residential areas create a sense of busyness in the immediate vicinity with quieter areas located within cul-de-sacs off residential roads and crescents
Functional	Residential

There are no landscape designations that cover LCA I2: Stanford-le-Hope and Corringham. This LCA comprises the urban area of two previously separate inter-war / post-war settlements. Some historic features remain; the majority of the built environment does not provide visual interest. Some priority habitats exist, designated as a Local Nature Reserve; aside from this, green space generally has an amenity function. Rural public footpaths are limited and major roads disrupt the tranquillity of the area.

The value attached to LCA I2: Stanford-le-Hope and Corringham is **low**.

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3.20.3 Susceptibility and sensitivity to change

Table 46 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 46: LCA I2: Stanford-le-Hope and Corringham - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Large housing area (1000-2999 dwellings / 33-100 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	N/A	There is insufficient space to accommodate a housing area of this size within this LCA.	N/A
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Low	Development of this scale in a settlement of this scale is unlikely to change the character of this area, resulting in low susceptibility to this development scenario.	Low
Minor Housing (under 75 dwellings / under 2.5 ha)	Very low	Development of this scale in a settlement of this scale is very unlikely to change the character of this area, resulting in very low susceptibility to this development scenario.	Very low
Flats (5-10 storeys in height)	Medium	Development of this type would not necessarily change the character of the area, depending on its relative location within the settlement and topography, resulting in medium susceptibility to this development scenario.	Medium
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A
Lorry parks (3.5-8 Ha)	N/A	There is insufficient space to accommodate development of this type within this LCA.	N/A

3.21 LCA J1: Langdon Lower Hill Slopes

3.21.1 Overview

This area occupies the lower slopes of the Langdon Hills, forming a band of undulating farmland between the settlements of Corringham and Basildon. The landscape slopes up towards the higher ground on the Langdon Hills from where there are views over the lowlands. The settlement pattern is typically rural and dispersed with scattered farmsteads although a small amount of ribbon development is present to the north of Fobbing.

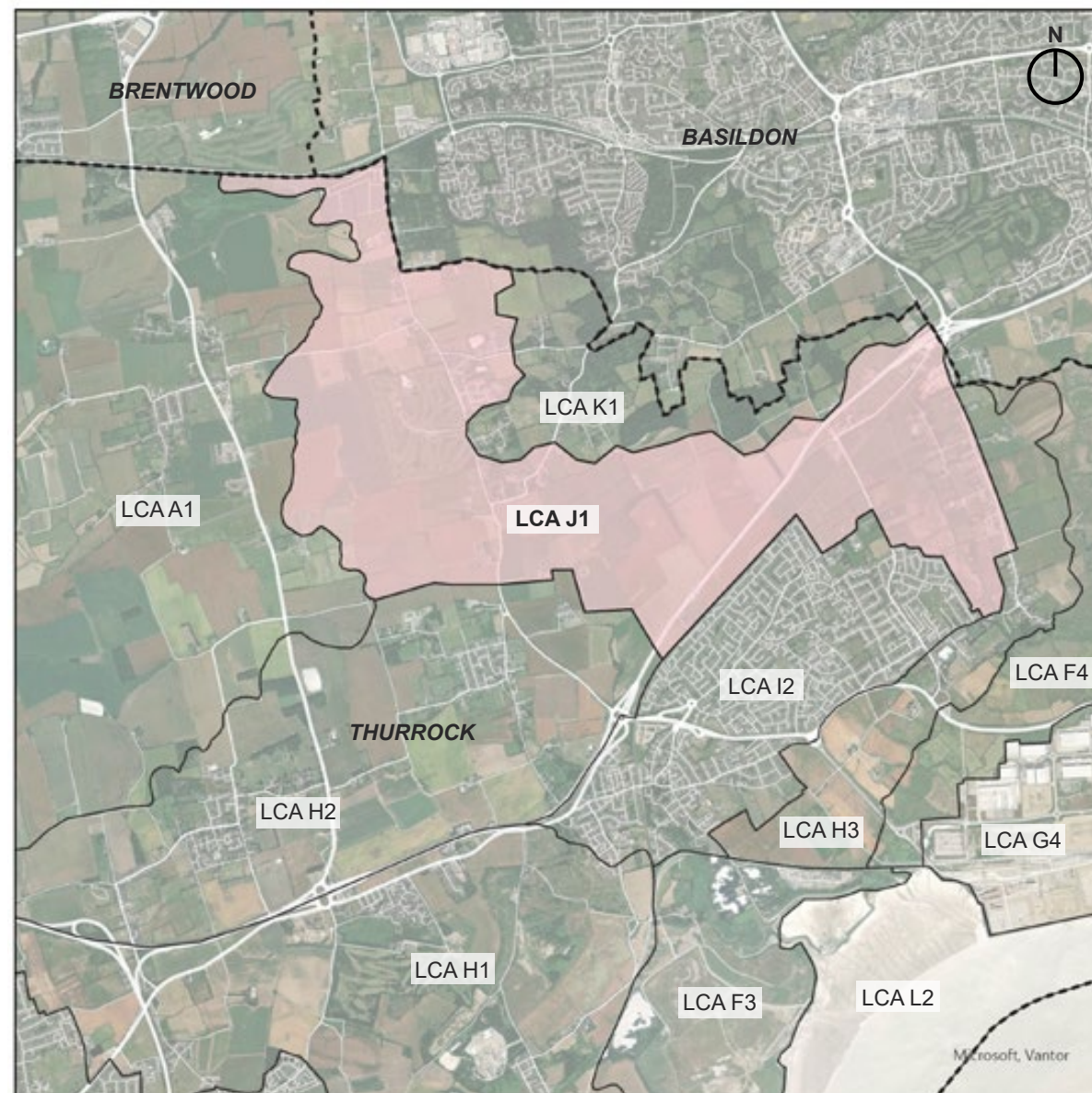


Figure 24: LCA J1: Langdon Lower Hill Slopes

3.21.2 Landscape value

Table 47 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA J1: Langdon Lower Hill Slopes.

Table 47: LCA J1: Langdon Lower Hill Slopes - Landscape value

FACTOR	EVIDENCE
Relevant designations	Local Wildlife Sites
Natural heritage	- Small areas of deciduous woodland and semi-improved grassland are priority habitats, some of which are of local nature conservation significance - Hedgerows provide a strong landscape structure across the area and the A13 corridor is recognised as a site of local nature conservation significance
Cultural heritage	None of note
Landscape condition	- Pattern has been altered by 20th century ribbon development, for example to the north of Fobbing on the small ridge. Properties north of Fobbing are limited to one side of the road and overlook open fields further to the east which creates a relatively exposed settlement edge to Fobbing - Pre 18th century enclosure was once in abundance throughout the LCA and although some still remains to date, farming pressures have seen the rise of 20th century agricultural field systems replacing earlier field patterns
Associations	No known associations
Distinctiveness	- Generally geometric fields and defined by hedgerows and hedgerow trees - Hedgerows forming field boundaries and lining country lanes are typically mature and in relatively good condition which creates a unified pattern and harmonious, high-quality landscape
Recreational	- Langdon Hills Golf and Country Club covers a large area in the centre which provides a recreational land use - Proposed Corringham to Langdon Hills Country Park green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map
Perceptual (Scenic)	- Relatively high scenic quality as a result of the undulating topography, intact field pattern and hedgerow network - Elevated landform provides a sense of prospect and the trees and woodlands and the historic buildings provides texture to the landscape - Wooded hills form a backdrop to most views in the western area whilst surprise views up to the wooded hills are available from gaps in tree belts and hedgerows lining the roads on the higher ground - Long-distance, panoramic views to the east and south over the Fobbing Marshes and River Thames from the settlement edge on the ridge north of Fobbing - Small geometric blocks of woodland are also generally in good condition and combine with hedgerows to help assimilate small areas of development and main roads into the landscape and this provides a largely unspoiled scenic quality - Farmland is generally well managed and in active use. Surprise views of the wooded hills in the north and the prospect and views over lower lying areas also contribute to the scenic quality.

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FACTOR	EVIDENCE
Perceptual (wildness and tranquility)	• London, Tilbury and Southend Railway has traversed the area since the 1850s but the construction of the road (now known as the A13) in the 1930s further fragmented the landscape and introduced an urbanising influence • Undulating landform and intact field boundaries create localised areas of Enclosure with a sense of tranquillity
Functional	• Mix of arable and pastoral farmland

There are no landscape designations that cover LCA J1: Langdon Lower Hill Slopes. This LCA consists of a mix of well-managed arable and pastoral farmland separated into remnant fields with hedgerows. Some 20th century ribbon development exists. Small areas of deciduous woodland and semi-improved grassland (priority habitats) exist. The undulating topography offers visual interest in the form of long-distance views. The area contains a number of PRowS and a golf club. A railway and the A13 disrupts and fragments the landscape.

The value attached to LCA J1: Langdon Lower Hill Slopes is **medium**.

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3.21.3 Susceptibility and sensitivity to change

Table 48 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 48: LCA J1: Langdon Lower Hill Slopes - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The open and rural character and size of this area mean that a new settlement of this size would take up a substantial part of the LCA and erode the rural character of the area. Susceptibility to a very large housing area is very high.	High
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The open and rural character and size of this area mean that another settlement of this size would take up a substantial part of the LCA and erode the rural character of the area. Susceptibility to a large housing area is very high.	High
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	High	The open and rural character and size of this area mean that another settlement of this size would be a notable introduction to the landscape. Susceptibility to a substantial housing area is high. Lower lying well enclosed areas are less susceptible than open areas.	High
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Medium	The open and rural character and human scale of this area mean that another settlement of this size would be a notable introduction to the landscape. Susceptibility to a small housing area is medium. Lower lying well enclosed areas are less susceptible than open areas.	Medium
Minor Housing (under 75 dwellings / under 2.5 ha)	Medium	The open and rural character of this area mean that new minor housing in this rural area would be a notable addition to the landscape. Susceptibility to a minor housing area is medium. Lower lying well enclosed areas are less susceptible than open areas.	Medium
Flats (5-10 storeys in height)	Very high	The open and rural character of this area mean that buildings of this scale would be a noticeable and distinct addition to the landscape, uncharacteristic of their surroundings. This area would have very high susceptibility to flats.	High
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The tranquil, rural character and human scale of this area mean this area has very high susceptibility to major warehouse development and associated activities.	High
Lorry parks (3.5-8 Ha)	Very high	Although there is some enclosure provided by high hedgerows, the continuous HGV movements and floodlit elements associated with this type of development mean that this area has very high susceptibility to this development scenario.	High

3.22 LCA K1: Langdon Higher Hills

3.22.1 Overview

This area of strongly undulating hills is characterised by irregular fields of pasture bounded by hedgerows and hedgerow trees and interspersed with large areas of woodland. The landscape is highly rural but contains localised areas of large houses and bungalows in a wooded setting. Individual plots still remain in some of the wooded areas.

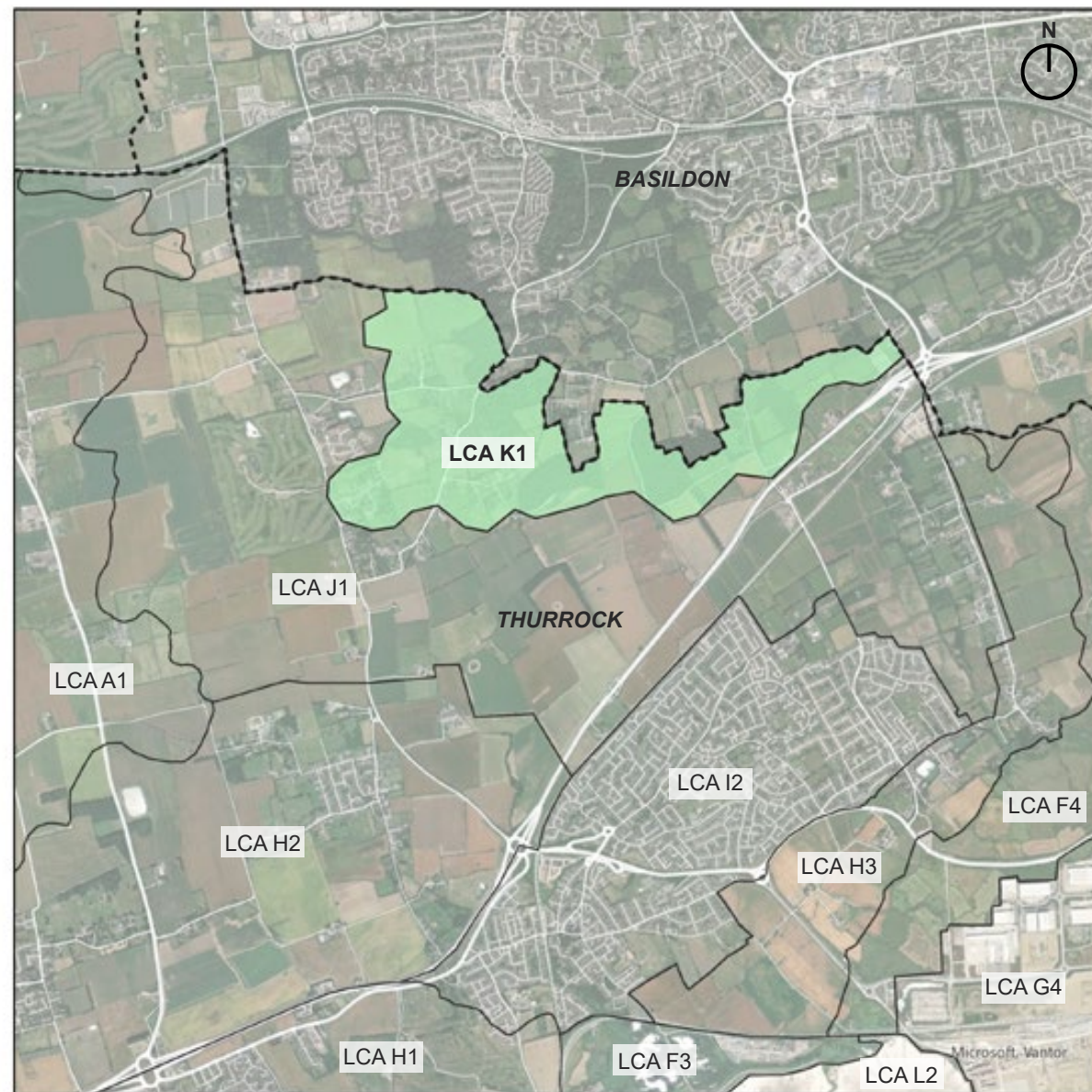


Figure 25: LCA K1: Langdon Higher Hills

3.22.2 Landscape value

Table 49 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA K1: Langdon Higher Hills.

Table 49: LCA K1: Langdon Higher Hills - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Langdon Ridge SSSI • Local Wildlife Sites
Natural heritage	• Langdon Hills Country Park: The woodland within this Country Park is a mixture of ancient and secondary woodland and flower-rich meadows and areas of dense scrubland • Hedgerow trees and areas of deciduous woodland (a priority habitat and many of which are local wildlife sites) • Langdon Ridge SSSI
Cultural heritage	• Remains of medieval embanked woodland enclosures and ancient field systems established for the purposes of woodland and livestock management, including for coppicing and as a deer park • Number of listed buildings around Langdon Hall Farm and the Church of St Mary and All Saints, and at Hawkesbury Manor
Landscape condition	• Landscape condition is good as a result of intact and well-defined irregular pastoral fields interlocking with mature woodland • Woodlands are typically well-managed as part of the Langdon Hills Country Park. Field gates and footpath junctions offer long ranging views which contributes to a remarkable landscape quality • Intensification of agriculture (conversion from pasture to arable and loss of field boundaries), and addition of modern housing at low density (the new built development has had relatively little influence over the wider landscape character due to tree cover)
Associations	• No known associations
Distinctiveness	• Contrast in openness and enclosure across the LCA • Dispersed farmsteads and localised areas of low-density houses and bungalows in a wooded setting, some on former plotlands • Buildings consist of historic halls and farmsteads (some timber-framed), such as Langdon Hall Farm and Hawkesbury Manor and more modern one and two-storey dwellings
Recreational	• Langdon Hills Country Park • Network of footpaths traverses the landscape and offers recreational connections as well as connecting a number of residential properties and neighbouring settlements • Langdon Country Park and surrounding woodlands are important recreational assets • Proposed Corringham to Langdon Hills Country Park green link, from the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023) map

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

FACTOR	EVIDENCE
Perceptual (Scenic)	• Buildings are typically set within woodland and are well integrated into the landscape • High scenic quality as a result of the undulating landform, intact field pattern and hedgerow network, views framed by woodland, and historic buildings • Panoramic views to the south, west and east from the hills over the adjacent lowlands, including across the Thames estuary and towards central London e.g. from the elevated arable field adjacent to Hall Wood looking south-west and from the sloping land near to One Tree Hill looking south • Wooded hills are a landmark in their own right and can be seen from long distances. Tall structures at London Gateway form prominent vertical landmarks • Some erosion of narrow rural lanes and increase in horsiculture and associated stables which has resulted in some visual clutter
Perceptual (wildness and tranquillity)	• Relatively naturalistic landscape with a sense of rural tranquillity and a human scale • Landscape has a sense of enclosure (provided by woodland) as well as a sense of prospect (arising from views over the surrounding lowlands). The woodland is a strong and unifying element
Functional	• Agriculture (a mixture of arable and pasture fields), recreational uses associated Langdon Hills Country Park, residential land use

There are no landscape designations that cover LCA K1: Langdon Higher Hills. This LCA consists of a mix of arable and pasture fields punctuated by blocks of woodland, many of which are Local Wildlife Sites, creating a contrast between openness and enclosure across the LCA and a sense of rurality. A SSSI can be found in the LCA as well as remains of medieval embanked woodland enclosures and ancient field systems. Some buildings exist, well integrated into the landscape; some of these have historic value and are listed, while others do not provide visual interest. The LCA contains several Country Parks with recreational and historical value, some containing ancient woodland. There is a network of footpaths across the LCA. The undulating topography provides a range of views of scenic quality.

The value attached to LCA K1: Langdon Higher Hills is **high**.

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

3.22.3 Susceptibility and sensitivity to change

Table 50 describes the susceptibility of the LCA to accommodating the range of development scenarios described in Section 2.2. It also calculates the resulting sensitivity of the LCA to each of these development scenarios using the matrix described in Section 2.2.

Table 50: LCA K1: Langdon Higher Hills - Landscape susceptibility and sensitivity

DEVELOPMENT SCENARIO	SUSCEPTIBILITY TO CHANGE	EVALUATION	SENSITIVITY
Very large housing area (over 3000 dwellings / over 100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would take up a substantial part of the LCA, resulting in the loss of highly valued features. Susceptibility to a very large housing area is very high.	Very high
Large housing area (1000-2999 dwellings / 33-100 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would take up a substantial part of the LCA, resulting in the loss of highly valued features. Susceptibility to a large housing area is very high.	Very high
Substantial housing area (300 to 999 dwellings / 11 to 33 Ha)	Very high	The rural character and size of this area means that a new settlement of this size would take up a substantial part of the LCA, resulting in the loss of highly valued features. Susceptibility to a substantial housing area is very high.	Very high
Small Housing area (75-299 dwellings / 2.5-11 Ha)	Very high	The rural and tranquil character of this area means that a new settlement of this size would be a notable introduction to the landscape, resulting in the loss of highly valued features. Susceptibility to a small housing area is very high.	Very high
Minor Housing (under 75 dwellings / under 2.5 ha)	High	The rural and tranquil character of this area means that minor housing in this rural area would be a notable addition to the landscape. Susceptibility to a minor housing area is high.	High
Flats (5-10 storeys in height)	Very high	The rural character of this area means that buildings of this scale would be a noticeable and distinct addition to the landscape. This area has a very high susceptibility to flats.	Very high
Major Warehouse/ Industry (buildings over 50,000m3 in volume)	Very high	The rural character and human scale of this area mean this area has a very high susceptibility to major warehouse development and associated activities.	Very high
Lorry parks (3.5-8 Ha)	Very high	Continuous HGV movements and floodlit elements associated with this type of development means that this area has very high susceptibility to this development scenario.	Very high

3.23 LCA L1: Long Reach to Northfleet Hope

3.23.1 Overview

Numerous jetties, wharfs and piers punctuate the northern bank of the River Thames between Aveley and Tilbury, which is heavily industrialised for most of its length. A dramatic and changing riverscape of river traffic, angular machinery and buildings, dock activity and new major urban and leisure developments contrasts with the small areas of open and low-lying undeveloped marshes and intertidal mudflats.

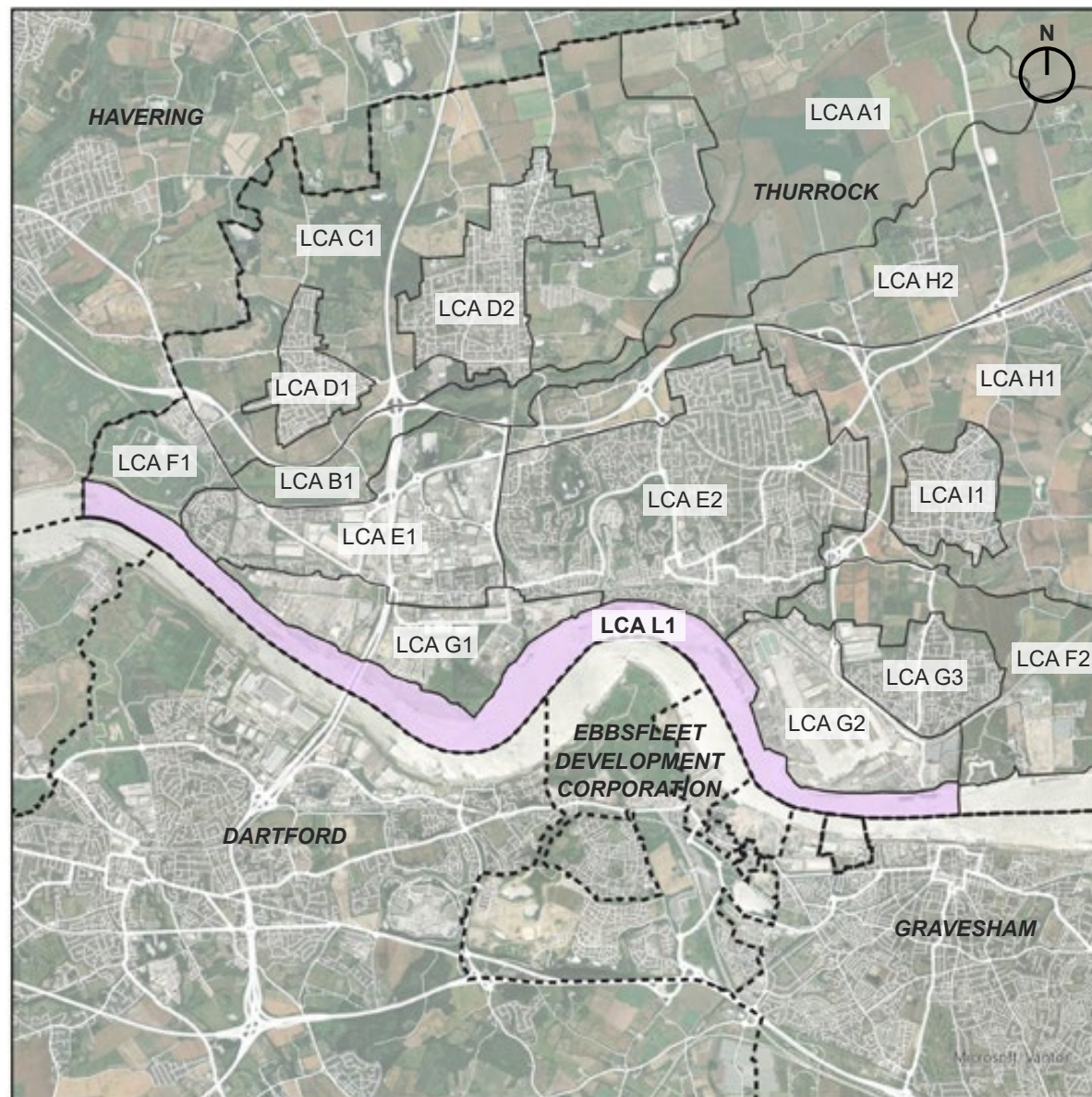


Figure 26: LCA L1: Long Reach to Northfleet Hope

3.23.2 Landscape value

Table 51 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA L1: Long Reach to Northfleet Hope.

Table 51: LCA L1: Long Reach to Northfleet Hope - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Thurrock Lagoon & Marshes SSSI; Inner Thames Marshes SSSI • Priority habitat • Adjacent to Rainham Marshes RSPB Nature Reserve
Natural heritage	• Small natural marshes at Aveley and West Thurrock, including the largest remaining expanse of wetland bordering the upper reaches of the Thames Estuary • Nationally important ecological habitats, linked to the wider Essex and Thames estuary • Wintering waders and wildfowl bring activity to the marshes and riverscape. • Large areas identified in the 'Essex Local Nature Recovery Strategy' (Essex County Council, 2025): Aveley Marshes, West Thurrock Lagoon & Marshes, Swanscombe
Cultural heritage	• Important passage close to London for the transport of people and goods • The Thames was used not only to transport goods (such as bricks and chalk mined nearby) but also as a source of water for local breweries and cement industry • Port of Tilbury opened in the late 19th century, bringing in thousands of dock workers, leading to the development of the town of Tilbury • During WWII a number of defences developed along the Thames • 18th century gunpowder magazines at Purfleet, now Grade I listed and a Scheduled Monument and home to the Purfleet Heritage and Military Centre • The riverside station (including floating landing stage) at Tilbury is a Grade II* listed structure • 'The Gull' light vessel is an old ship wreck berthed at Grays. She operated as part of the safe navigation service provided under the grant of a Royal Charter by Henry VIII in 1514 to a fraternity of mariners • There are strong cultural, literary and artistic associations of the River Thames and the river has been a key influence on both the physical and cultural development of Thurrock as a conduit for settlers, traders and invaders • Samuel Pepys mentioned buying fish from local fishermen at the river at Grays and Gravesend in his diary on September 24th 1665 • Rev John Newton was brought up locally and was nearly killed in a boating accident at Purfleet; later he wrote of his life experiences in the Hymn 'Amazing Grace'
Landscape condition	• Dynamic riverscape of erosion, transportation and deposition (the alignment of the river has changed over time) where natural processes have been heavily altered by human influences, particularly river walls.
Associations	• Strong cultural associations of the River Thames as a conduit for settlers, traders and invaders
Distinctiveness	• Dramatic riverscape of angular machinery, buildings and docks contrasts with the ancient areas of undeveloped marshland

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FACTOR	EVIDENCE
Recreational	• London Loop long distance footpath and NCN 13 follows the riverside along the Wennington and Aveley Marshes, before terminating at Purfleet
Perceptual (Scenic)	• Open character, large-scale and long distance views along the river in both directions, over the open river and adjacent open, flat mudflats and marshes. • Strong visual juxtapositions of wide open marshes and flats with adjacent industrial machinery create interesting scenic compositions • Riverside is mostly industrialised along its northern bank, with areas of settlement at Purfleet and Grays; heavily used by commercial shipping traffic with oil tankers, container ships, bulk carriers and roll-on/ roll-off (ro-ro) ferries frequently in view • Industrial and port development includes the port at Tilbury, the London Cruise terminal, and wharfs, jetties and piers dotted along the length of the riverside • Waterfront at Grays enables panoramic views across and along the River Thames • The Queen Elizabeth II Bridge, which provides the main crossing for the clockwise M25, is visually dominant
Perceptual (wildness and tranquility)	• Industrial influences visible along the riverside including West Thurrock port
Functional	• Provides an important link between London and the coast and functions as a transport route as well as an important recreational, ecological and archaeological resource

There are no landscape designations that cover LCA L1: Long Reach to Northfleet Hope. This LCA consists of the stretch of the River Thames between Aveley Marshes and Tilbury Docks. The riverside on the edge of the character area is dominated by industry; there are open, panoramic views across the river from the riverbank, with the Queen Elizabeth II Bridge featuring in many views. Pockets of ecologically important marshland create visual interest amongst the industrial infrastructure.

The value attached to LCA L1: Long Reach to Northfleet Hope is **high**.

3.23.3 **Susceptibility and sensitivity to change**

This LCA cannot accommodate any of the development typologies being assessed. Susceptibility and sensitivity to change are therefore not evaluated.

3.24 LCA L2: Gravesend Reach to Sea Reach

3.24.1 Overview

A wide, shallow river reach that widens towards the east, supporting a dramatic and changing riverscape of river traffic, angular machinery and buildings, dock activity and new major urban and leisure developments contrasting with large areas of open and low-lying undeveloped marshes and intertidal mudflats with changing light reflected on the constantly moving water of the Thames.

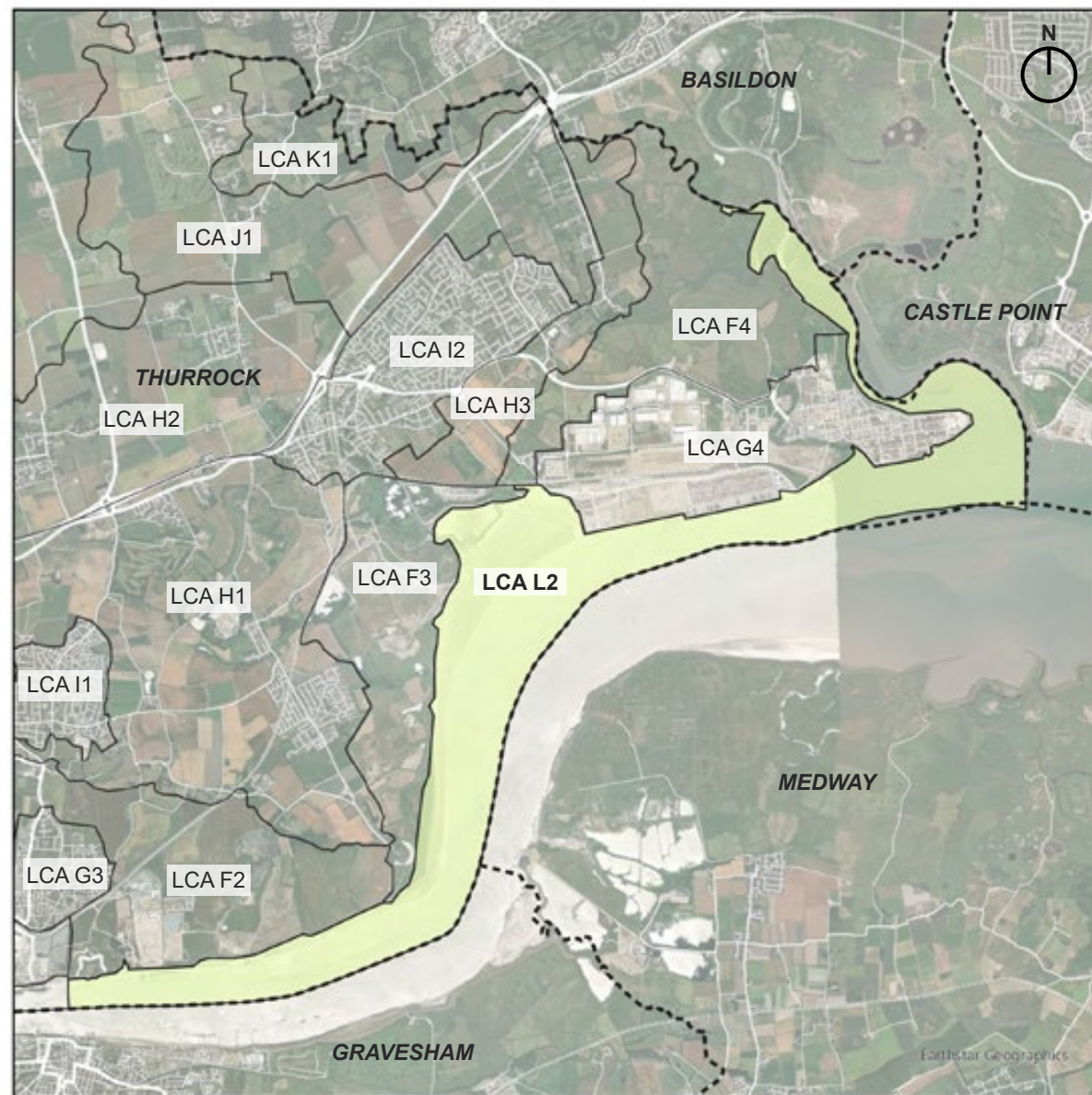


Figure 27: LCA L2: Gravesend Reach to Sea Reach

3.24.2 Landscape value

Table 52 below sets out an assessment of the factors which contribute to the value attached to the landscape of LCA L2: Gravesend Reach to Sea Reach.

Table 52: LCA L2: Gravesend Reach to Sea Reach - Landscape value

FACTOR	EVIDENCE
Relevant designations	• Essex Coast Environmentally Sensitive Area • Thames Estuary & Marshes RAMSAR Site / SPA • Mucking Flats and Marshes SSSI, Holehaven Creek SSSI • Adjacent to several Local Wildlife Sites • Greater Thames Marshes Nature Improvement Area (NIA)
Natural heritage	• Area around Mucking Flats is of international importance for bird species and large swathes of its semi-natural habitat are designated as an SPA and RAMSAR Site. It provides some of the best breeding sites for rare wetland birds in southern England • Greater Thames Marshes is one of the best and most important places in the country for nature including breeding waders, invertebrates, wintering waterfowl, fish and marine mammals and water voles • Mucking Flats and Marshes comprise an extensive stretch of Thames mudflats and saltmarsh, together with sea wall grassland. Wintering wildfowl and waders reach both nationally and internationally important numbers on the mudflats, roosting and feeding on adjacent saltmarsh and disused silt lagoons
Cultural heritage	• River was also an important location for military defences. In 1539 long range guns were mounted in the blockhouses on the bank of the river. Close by is a tower, the top of which was a Second World War radar array • Tilbury Fort is a Baroque fort east from Tilbury Ferry terminal. Fronted by gun lines crossing their fire with the defences at Gravesend • Coalhouse Fort is one of three Thames Side Forts that were designed to defend the Thames Estuary from Napoleonic attacks • Strong cultural, literary and artistic associations of the River Thames and the river has been a key influence on both the physical and cultural development of Thurrock as a conduit for settlers, traders and invaders
Landscape condition	• Home to substantial expanses of areas that are generally free of noticeable human influence
Associations	• River provides an important link between London and the coast and functions as a transport route as well as an important recreational, ecological and archaeological resource. Thames River and estuary has provided a national gateway port since the Roman Period.
Distinctiveness	• Strong visual juxtapositions of wide open marshes and flats with adjacent industrial machinery create interesting scenic compositions • Distinctive landmarks of coastal military heritage including forts at Coalhouse and Tilbury lie on the northern bank of the river
Recreational	• Thameside footpath between Tilbury and Coalhouse forts • Thurrock Thameside Nature Park provides an important visitor attraction and educational facility. The area also provides public access to the river, such as at Coalhouse Fort

SECTION 3: PART A - LANDSCAPE SENSITIVITY ASSESSMENT

FACTOR	EVIDENCE
Perceptual (Scenic)	• An open character with expansive views where big skies often dominate • The tides fill and empty the meandering Holehaven Creek and across the fringing marshes and mudflats, providing interesting temporal variation • Riverside is largely characterised by marshes, interspersed with areas of industry including a power station and industrial site at London Gateway Port. Tilbury Fort and Coalhouse Fort are now visitor attractions • The shorelines have a sense of openness, horizontality and long distant views • Marked contrast associated with the wild and remote low-lying marshy coastal landscape with uninterrupted, far-reaching views out across the Thames
Perceptual (wildness and tranquility)	• Old village of East Tilbury overlooks the river by Coalhouse Fort but the remaining area of riverside is largely free from settlement • Mudflats form glistening expanses and are free from man-made intrusion • Wide expanses of mudflats at Mucking Flats form remote, wilderness areas.
Functional	• Thameside footpath between Tilbury and Coalhouse forts

There are no landscape designations that cover LCA L2: Gravesend Reach to Sea Reach. This LCA consists of the stretch of the River Thames between Tilbury Docks and Holehaven Creek. Riverside is largely characterised by marshes, some of international importance, interspersed with areas of industry. A riverside footpath provides access to two historic forts and offers expansive views across the water.

The value attached to LCA L2: Gravesend Reach to Sea Reach is **high**.

3.24.3 **Susceptibility and sensitivity to change**

This LCA cannot accommodate any of the development typologies being assessed. Susceptibility and sensitivity to change are therefore not evaluated.



SECTION 4

Part B - Landscape capacity assessment

Introduction

This section considers how development within the established clusters could be accommodated within the landscape. These clusters are mapped in Figure 28. More details on the methodology can be found in Section 2.3.

Each cluster appraisal is structured as follows. The first part provides an overview of the sites included in the cluster by identifying which LCAs overlap with the assessed sites and how sensitivities may differ across the cluster depending on local differences in the baseline situation. In some instances, a potential housing site and a potential employment site overlap.

The second part identifies examples of opportunities for landscape integration that could be provided by development within and adjacent to the assessed sites. These opportunities are mapped and described. The opportunities relate spatially to the landscape features listed in Section 2.3.

The opportunities identified fall into four typologies. Each opportunity has been assigned a set of nature-based solutions. These are both listed in the box below.

Landscape integration opportunities	Nature-based solutions (See Section 5: Part C)
 Landscape corridor	 Habitat creation
 Recreational corridor	 Habitat restoration / enhancement
 Spatial buffer	 Walking and cycling route
 Restoration area	 Recreational feature
	 Protection / enhancement of setting
	 Protection / enhancement of views
	 Ecological corridor
	 Hedgerow enhancement

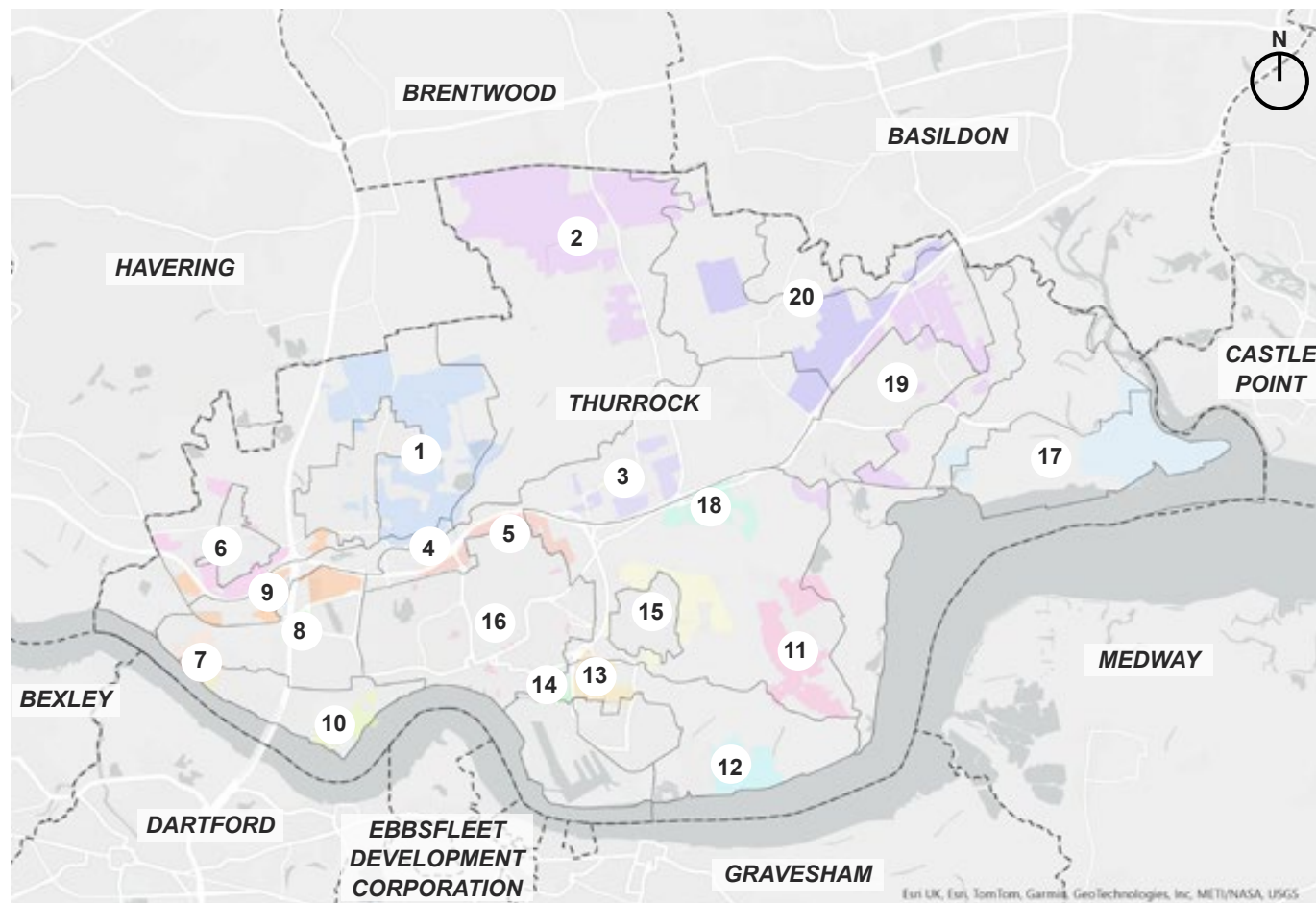


Figure 28: Potential Housing and Employment Site Clusters in Thurrock

- Legend**
- Local Planning Authority boundary
 - Landscape Character Area boundary
 - 1 Cluster number

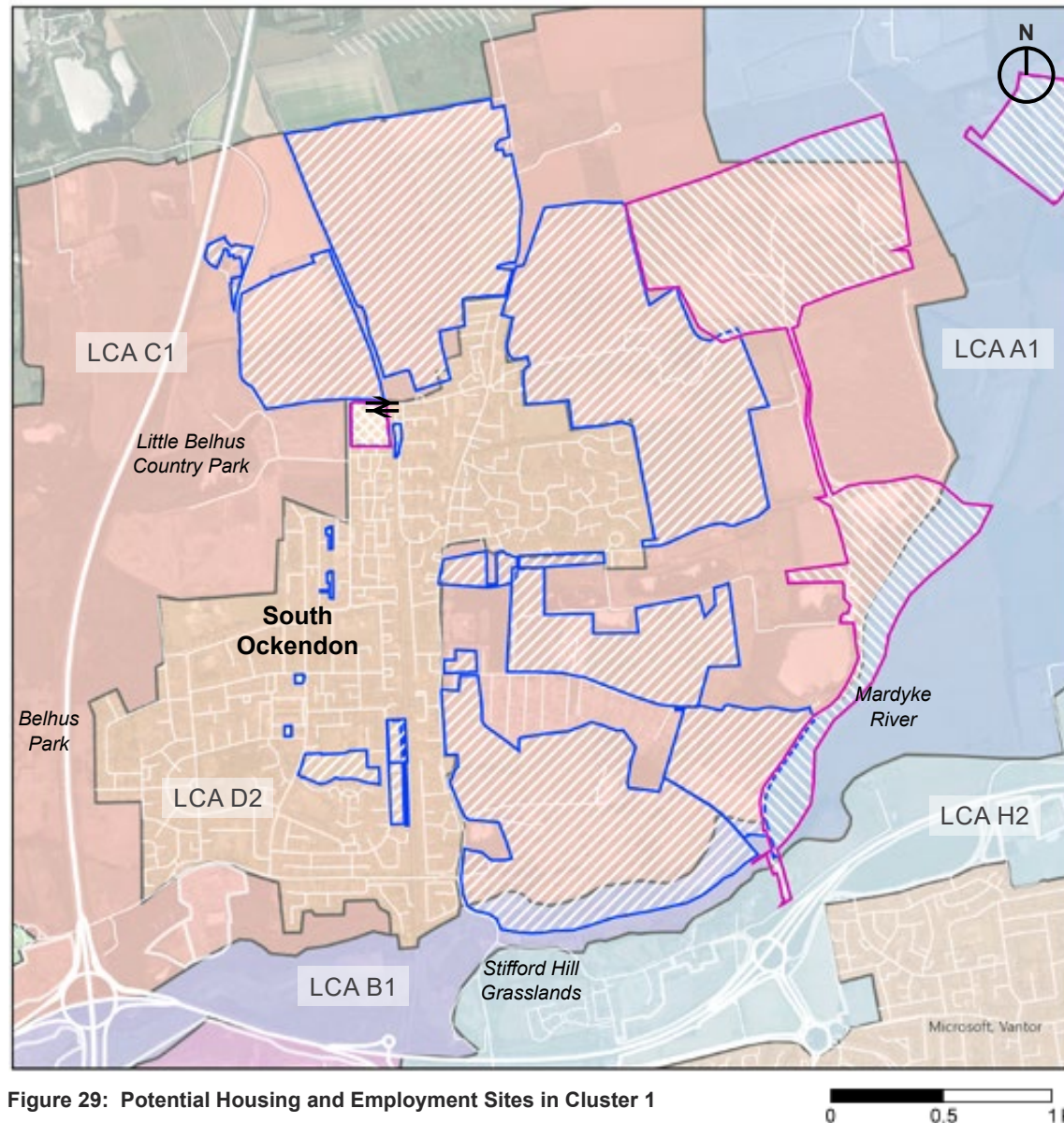
4.1.1 Overview

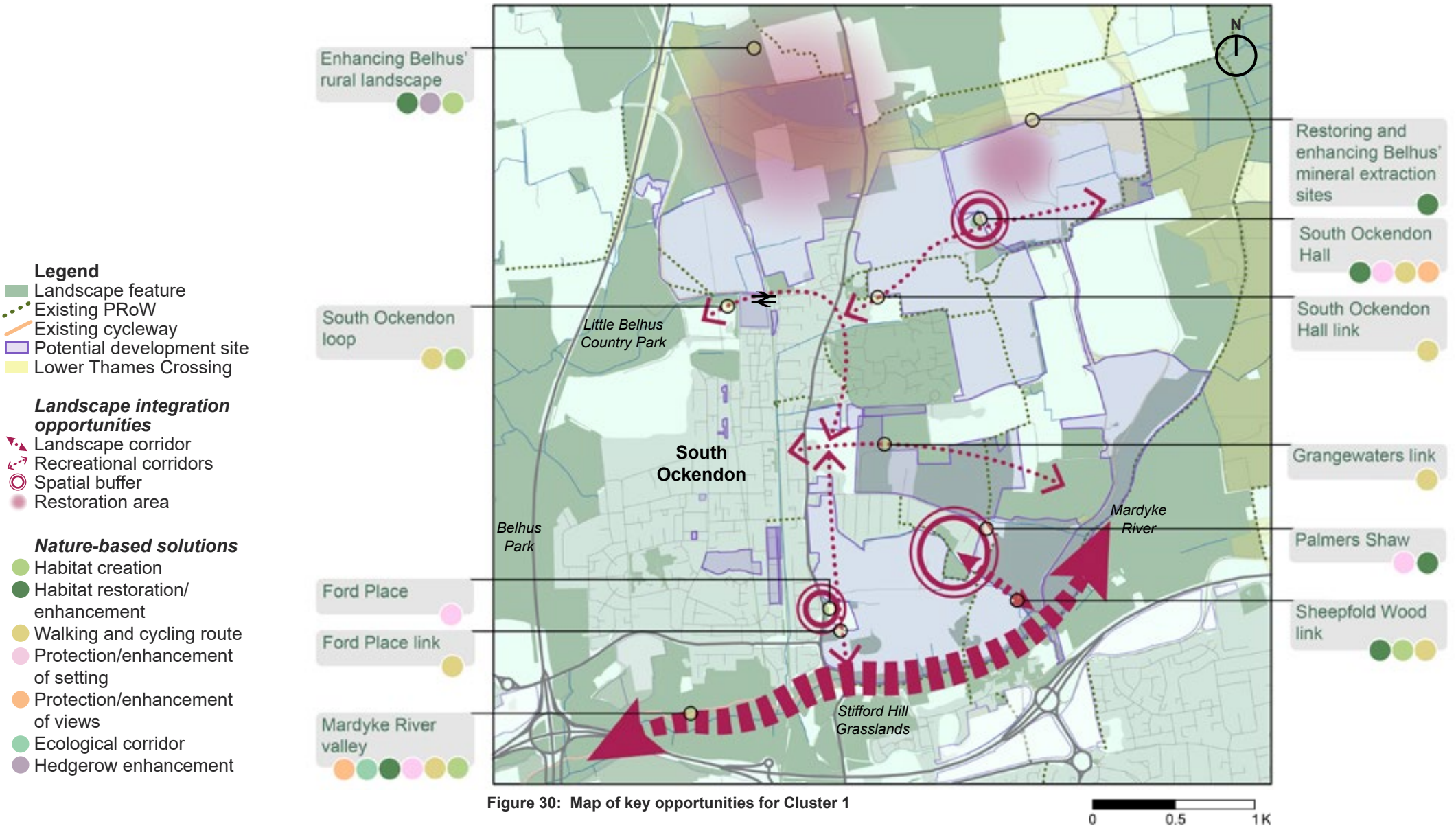
The sites in this cluster are predominantly located within LCA C1: Belhus Farmed River Terrace Gravels. Some smaller sites are located within LCA D2: South Ockendon. Small parts of a few sites are located in LCA A1: Bulphan Fenland and LCA B1: Lower Mardyke River Valley. A very small part of one site is located within LCA H2: Orsett & Horndon-on-the-Hill.

Sensitivities to housing and employment development range from very low to very high. Sites in the south and south-east of the cluster near and within the Mardyke River Valley are likely to be more sensitive to development. Parts of LCA C1 to the west of South Ockendon contain a greater concentration of features of landscape value; sensitivities to development nearer these areas are therefore higher.

Legend

-  Potential Housing site within cluster
-  Potential Employment site within cluster
-  Other potential Housing/Employment sites outside cluster





4.1.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA C1 contains several wooded areas, many of which are priority habitats and some of which are ancient woodland. LCA B1 covers the Mardyke River valley, a well-defined valley with wooded sides. These patches are valued for the sense of enclosure they provide to recreational users. The **Palmers Shaw - Sheepfold Wood link** presents an opportunity to connect patches of woodland through habitat creation and habitat enhancement, thereby providing more opportunities for enclosed wooded spaces that are characteristic of the LCA. Further, the setting of **Palmers Shaw** could be preserved and enhanced to maintain its character.

The **Mardyke River valley**, in LCA B1, serves an important function of acting as a natural break between development. It consists almost entirely of Priority Habitat and Local Wildlife Sites, including ancient woodland and a remnant ancient system of grazing marsh; the result is a cohesive, ecologically integrated natural / semi-natural green space, that provides a strong sense of enclosure. Its qualities should be conserved and enhanced, where needed in order to maintain its character. Grazing marsh and managed wetland could be restored here and along the river valley towards the north-east (into LCA A1) to rejoin other grazing marsh habitats. Enhancing accessibility through active travel interventions would elevate the value of the valley by improving connectivity. Views from elevated vantage points across the valley should also be conserved.

South Ockendon Hall is home to two Scheduled Monuments and **Ford Place** is home to several listed buildings. The setting of these important heritage assets that contribute to landscape character should be conserved; their immediate surroundings also contain priority habitat that may benefit from enhancement. Some public rights of ways are poorly maintained or suffer from a lack of connection. The **South Ockendon Hall link**, the **Grangewaters link** and the **Ford Place link** present opportunities to improve active travel connections between these features and South Ockendon. Active travel enhancements may consider how South Ockendon connects to Orsett Fen to the east.

Restored mineral extraction sites are another defining landscape feature of LCA C1; some have however been poorly restored or are poorly maintained, resulting in a sense of intrusion in an otherwise largely agricultural landscape. Further **restoring and enhancing Belhus' mineral extraction sites** could make a positive contribution to landscape character.

Agricultural fields have suffered from boundary loss over the last century, resulting in gappy hedgerows in a poor state. **Enhancing Belhus' rural landscape** presents opportunities to restore hedgerows and introduce new farming landscapes such as biodiverse farming or agroforestry, leveraging environmental stewardship land in the north of LCA C1. These interventions could consider integrating a new

woodland belt in the north of LCA C1, connecting existing patches of woodland. These enhancements would help restore elements that are characteristic of the wider area.

The western half of LCA C1 contains parkland, such as Belhus Woods Country Park and Belhus Park and Local Wildlife Sites, such as Little Belhus Country Park. Many of these are accessible woodlands. The **South Ockendon Loop** could help provide an accessible active travel corridor and new habitats in the eastern half of LCA C1 that introduce features that are more characteristic of this LCA, such as woodland.

4.2.1 Overview

Sensitivities to development range from medium to high. The northern half of LCA A1 contains a higher density of settlements, industrial sites and agricultural sites; it still has an open, agricultural character but is likely to be less sensitive to development than the less developed southern half of the LCA. Areas near the railway line and the Bulphan Bypass may also be less sensitive due to the presence of these landscape detractors. Despite generally high sensitivities in LCA J1, the northern corner may have lower sensitivity to development due to its proximity to railway infrastructure, solar infrastructure and the large settlement of Basildon to the east.

Legend

-  Potential Housing site within cluster
-  Potential Employment site within cluster
-  Other potential Housing/Employment sites outside cluster

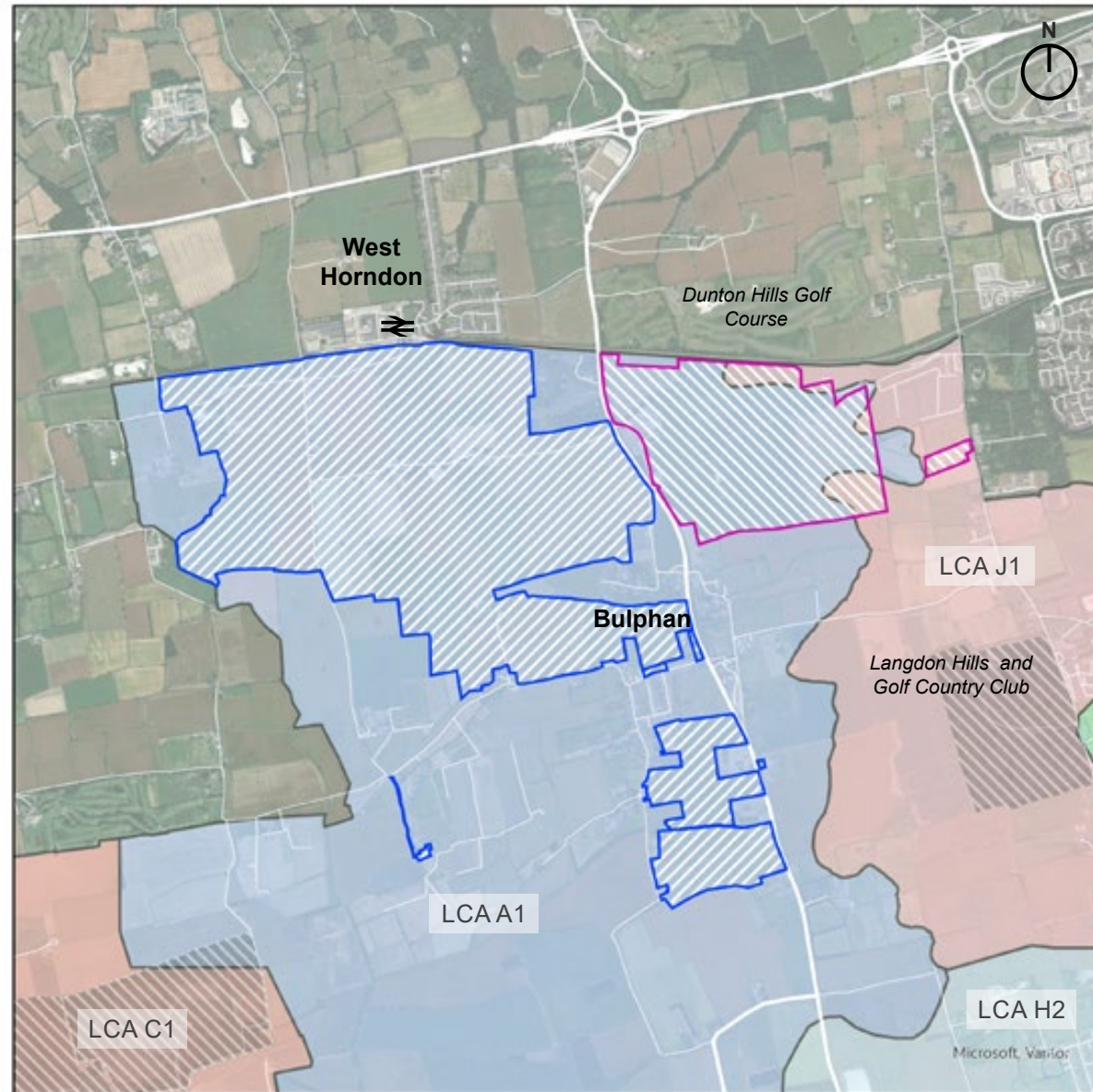


Figure 31: Potential Housing and Employment Sites in Cluster 2



4.2.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. This LCA is home to several small pockets of priority habitat deciduous woodland, including Lower Shaw Local Wildlife Site, that are fragmented and isolated. In addition, hedgerows and field boundaries have degraded over time. The **Lower Shaw link** opportunity promotes a habitat link between pockets of woodland and the Local Wildlife Site in the north through hedgerow restoration, which would contribute to restoring historic field patterns while enhancing important landscape features.

A large area of grazing marsh is located to the south of the cluster, linked to the Mardyke River valley. The **Mardyke Grazing Marsh** opportunity promotes strengthening the presence of grazing marsh, considered a valuable and relatively rare habitat, through habitat creation and restoration. This could form part of a stronger natural and recreational axis along the Mardyke River valley, aligning with the aim of establishing the Mardyke Valley Country Park as part of the 'Thurrock Green & Blue Infrastructure Strategy' (LUC, 2023).

Public right of way provision in the north-south direction is generally acceptable around this cluster, however east-west connectivity is poor. The presence of bridleways and cycleways is very low here, or disconnected where present. **Bulphan active travel connections** promotes new shared east-west travel corridors, including crossings over the Bulphan Bypass with a focus in Bulphan. Interventions in the public right of way network could help reinforce links to Thorndon Country Park outside the Thurrock area to the north.

The **Bulphan North-South green link** opportunity seeks to establish a new active travel and habitat corridor to promote accessibility to areas that hold biodiversity potential as identified in the 'Essex Local Nature Recovery Strategy' (Essex County Council, 2025) and reinstate historic field patterns through hedgerow restoration and habitat enhancement.

A few listed buildings are located on sites within this cluster. **Preserving Bulphan's listed buildings** encourages thoughtful consideration of the setting of significant heritage assets that contribute to landscape character, including the Church of St Mary.

Open views across the landscape are characteristic of this LCA. **Preserving Bulphan's open views** promotes the consideration of these views in order to maintain the character of the landscape.

This LCA is home to a series of wet ditches and small rivers as well as China Lake, a small reservoir with recreational potential. **Enhancing Bulphan's blue infrastructure** promotes enhancing, enlarging or naturalising the area's waterways and waterbodies to create a connected blue infrastructure network, complemented by public rights of way.

4.3.1 Overview

The sites in this cluster are located within LCA H2: Orsett & Horndon-on-the-Hill.

Sensitivities to development range from medium to high. This LCA is a relatively cohesive landscape of well-defined irregular fields, interspersed with historic villages. Given their contributions to landscape character extend across most of the area, sensitivity to development is generally high across the LCA. However, proximity to larger settlements such as Grays and South Ockendon in the western part of the LCA, where this cluster is located, may result in lower sensitivity in this part. The A13 at the southern boundary of the LCA detracts from landscape character; reducing sensitivity.

Legend

-  Potential Housing site within cluster
 Other potential Housing/Employment sites outside cluster

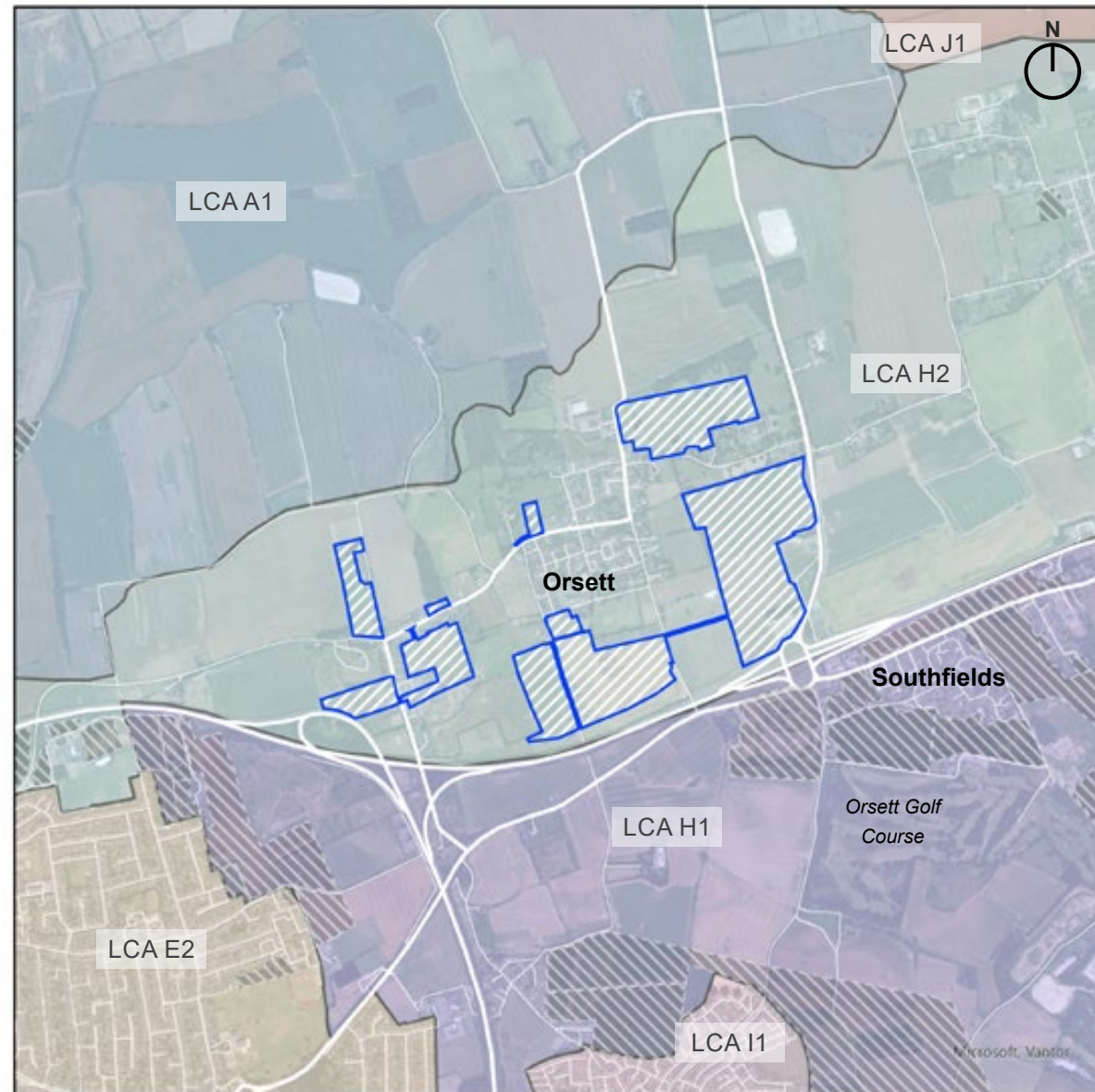


Figure 33: Potential Housing and Employment Sites in Cluster 3



4.3.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. A Scheduled Monument, the **Crop Mark Complex**, is located to the west of the cluster, forming part of the LCA's sense of history and time depth. New development should ensure that it is protected and its setting conserved. A spatial buffer could be established through habitat creation / restoration. Connections towards the site can be enhanced across the parcels, particularly towards Orsett.

There are several small, isolated blocks of deciduous woodland, some priority habitat, especially in the north and north-east of the cluster. These provide a sense of rurality in this part of the LCA. The **Orsett woodland belt** opportunity promotes the establishment of new woodland corridors to enhance the character of this LCA, including through the creation of a buffer to the A13.

The irregular field pattern and strong boundary definition are important characteristics of the LCA. New development could contribute to **enhancing hedgerow field boundaries**, which would help maintain the character of the LCA.

There is an opportunity to establish the beginning of an **Orsett active travel loop** through the arrival of new development by creating new circular

connections around the settlement that connect into the existing PRow network, creating an integrated system of active travel corridors. New development should make sure to preserve and enhance existing connections, particularly in the south.

Areas of biodiversity interest have been identified as part of the 'Essex Local Nature Recovery Strategy' (Essex County Council, 2025). **Restoring Western Orsett's habitats** presents the opportunity to safeguard and restore these parcels of land, including the establishment of active travel connections to this area for residents.

A substantial part of Orsett is designated as a conservation area and several listed buildings can be found in and around the settlement. The **Orsett Conservation Area and listed buildings** opportunity encourages new development to conserve the setting of the settlement's conservation area and listed buildings, including key views to and from Orsett. This includes views towards the Langdon Hills in a north-easterly direction. The consideration of these heritage assets will help maintain their contribution to landscape character.

4.4 Cluster 4: North Stifford

4.4.1 Overview

This cluster comprises one site, located adjacent to the settlement of North Stifford, south of the Mardyke River valley. This site is mapped in Figure 35.

The sites in this cluster are located within LCA H2: Orsett & Horndon-on-the-Hill.

Sensitivities to development range from medium to high. The western part of this LCA is likely to have lower sensitivity to development than the east due to proximity to larger settlements such as Grays and South Ockendon. The northern area of the site has higher sensitivity as it is closer to a greater concentration of features of landscape value such as the Mardyke River valley and areas of priority habitat. The southern area of the site is adjacent to the A13, which lowers sensitivity.

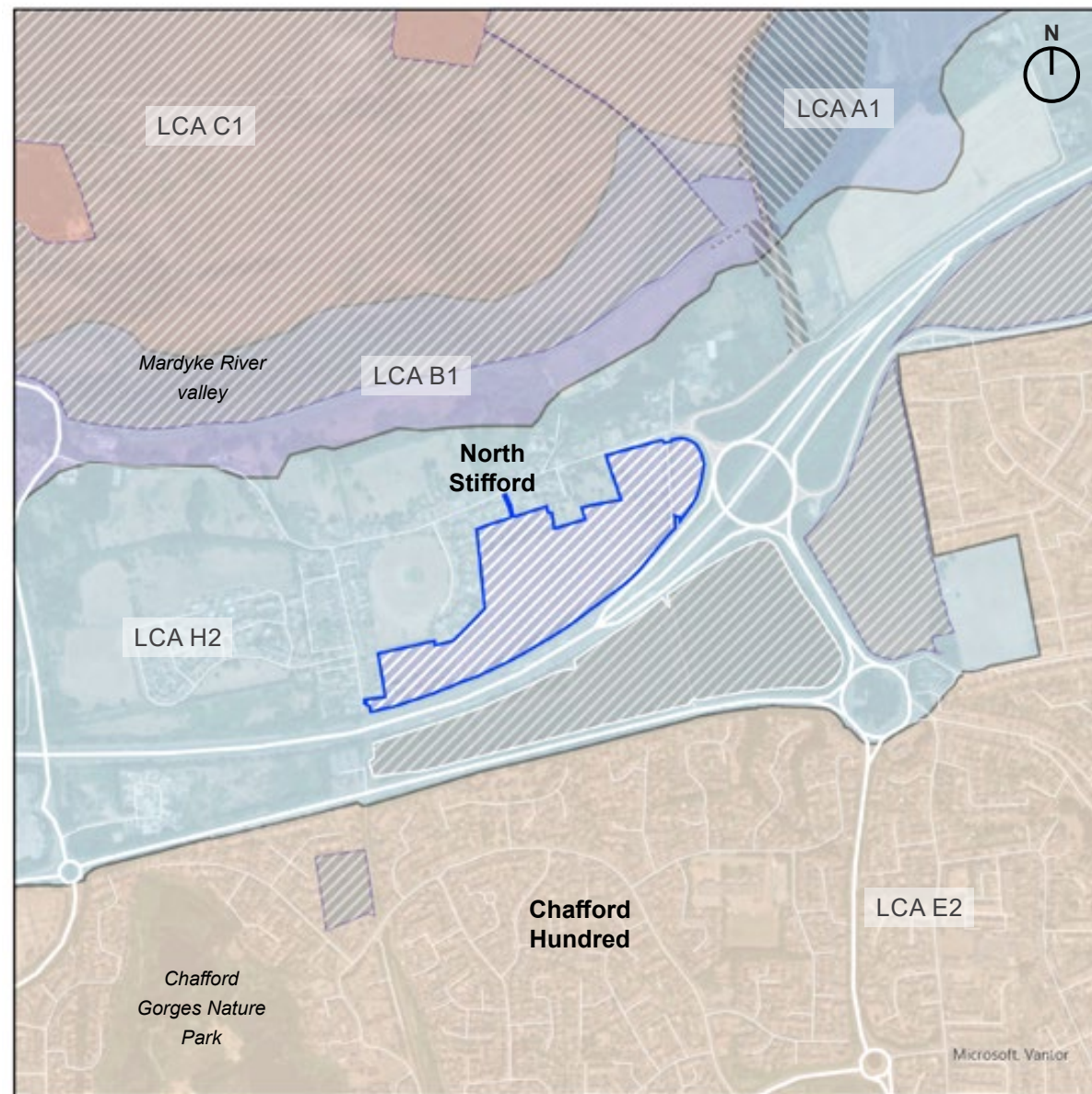


Figure 35: Potential Housing and Employment Sites in Cluster 4

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SECTION 4: PART B - LANDSCAPE CAPACITY ASSESSMENT

4.4.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. The Mardyke River valley is an important green corridor both for biodiversity and local residents, designated a Local Wildlife Site and home to several priority habitats. Residents living in the north of North Stifford benefit from proximity to these features that form an important part of the character of the area, while those living in the south of the settlement are located nearer the A13 and the settlement of Grays. The **A13 habitat buffer** would seek to establish a new woodland belt to the south of North Stifford, which could provide a greater sense of rurality for North Stifford residents, which is characteristic of most of the LCA and create further connections to other priority habitats including to the north within the Mardyke River valley.

The Grade I listed **Church of St Mary the Virgin** is an important heritage asset for the settlement of North Stifford, and its churchyard is a Local Wildlife Site. The setting of these two features should be conserved and the churchyard could be connected to the A13 habitat buffer through the establishment of habitat corridors, building on the existing PRow network.

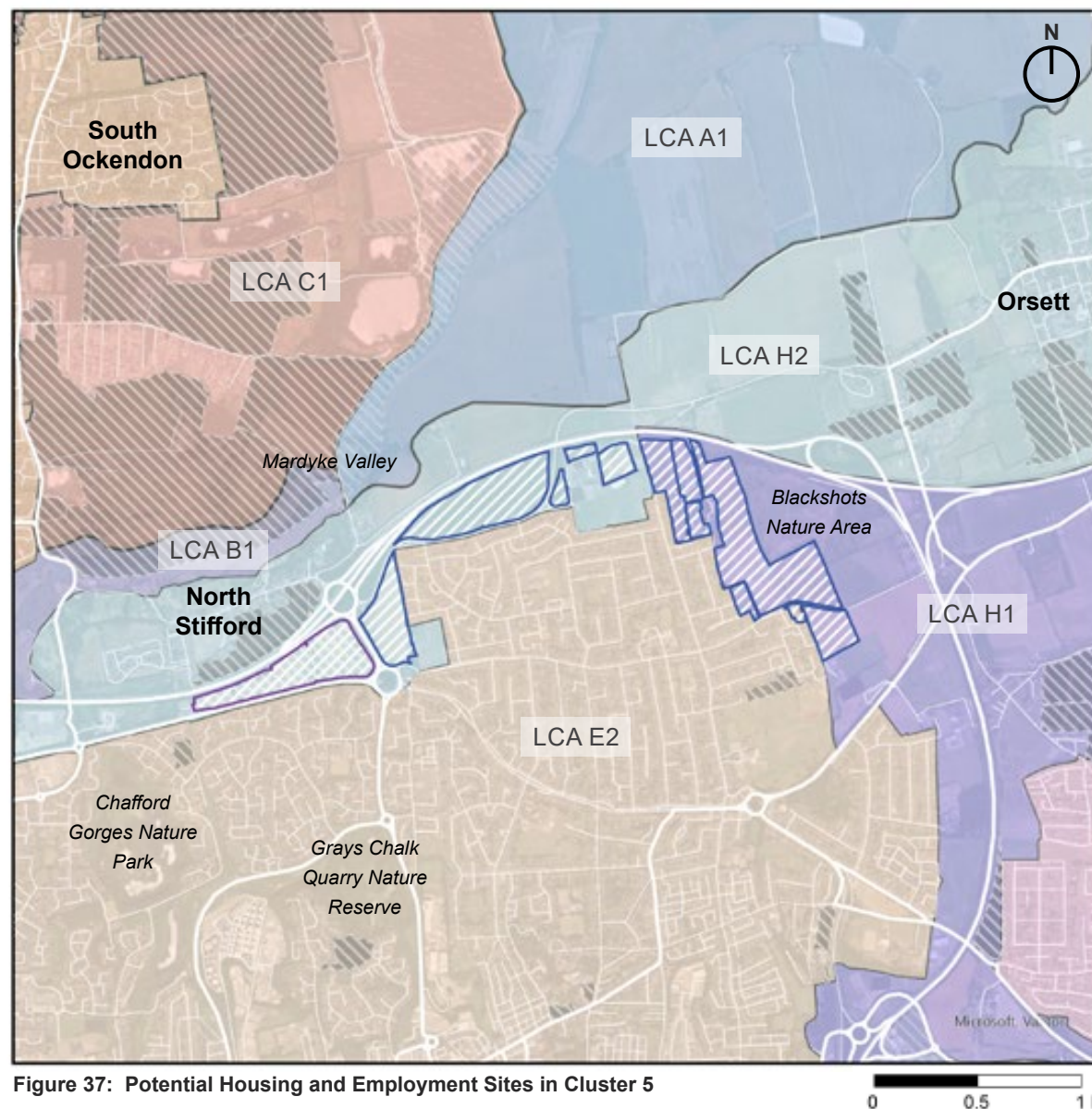
4.5.1 Overview

The sites in this cluster are predominantly located within LCA H2: Orsett & Horndon-on-the-Hill and LCA H1: East & West Tilbury. A very small area is located within LCA E2: Grays, Chafford Hundred & South Stifford.

Sensitivities to development are very low to high. Generally, the sites in this cluster are likely to have lower sensitivities to development compared to other parts of LCA H1 and LCA H2 due to their proximity to Grays and the A13. However, the sites in the eastern part of the cluster are likely to have higher sensitivities to development as they are next to a greater concentration of features with landscape value, including a Scheduled Monument (some overlap with potential development sites), a Local Wildlife Site and areas identified as part of the ‘Essex Local Nature Recovery Strategy’ (Essex County Council, 2025). Whilst the Mardyke River valley is an important feature of biodiversity value, the A13 acts as detractor to landscape character in this part of the LCA.

Legend

-  Potential Housing site within cluster
-  Potential Employment site within cluster
-  Other potential Housing/
Employment sites outside cluster



 Recreational corridor
 Spatial buffer

- Habitat creation
- Habitat restoration/
enhancement
- Walking and cycling route
- Protection/enhancement
of setting



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4.5.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. The sites in the north-east of the cluster lie adjacent to the Blackshots Nature Area, also known as the Ron Evans Memorial Field. The **North Grays green loop** opportunity could help enhance this feature by improving its setting while also improving connections directly to north Grays and connections round the settlement, including to Blackshots Recreation Ground. This loop could eventually extend further south to incorporate other landscape features such as Chadwell Wood and Hangman's Wood & Deneholes SSSI. This green asset could also contribute to habitat restoration and enhancement in the north-east, where the 'Essex Local Nature Recovery Strategy' (Essex County Council, 2025) has identified sites of biodiversity interest and the provision of a habitat buffer to the A13 to the north. These interventions would help enhance the character of these urban fringe areas so that they resemble other parts of their respective LCAs.

A Scheduled Monument, the **Crop Mark Complex**, is located to the north-east of the cluster and overlaps with some of the sites within the cluster. New development should ensure that it is protected, including the listed buildings within the Scheduled Monument site and nearby, since this collection of features forms a distinctive asset to this part of Thurrock. A spatial buffer could be established through habitat creation / restoration. Connections towards the site from Grays can be enhanced across the parcels.

4.6 Cluster 6: Aveley

4.6.1 Overview

This cluster comprises 10 sites, located in the western part of Thurrock, in and around the settlement of Aveley. The sites are mapped in Figure 39.

The sites in this cluster are predominantly located within LCA C1: Belhus Farmed River Terrace Gravels, with a small fraction located within LCA D1: Aveley.

Sensitivities to development range from very low to high. There is a noticeable difference in sensitivities to development between the settlement of Aveley (LCA D1) and its surroundings (LCA C1); Aveley has lower sensitivities to certain types of development. In addition, the north-western part of LCA C1, north of Aveley, contains more features of landscape value than the south-western corner of the cluster, south of Aveley, which is impacted by the presence of the A13 and the settlement of Aveley itself. As a result, the latter area is likely to have lower sensitivity to development than sites further north within this cluster.

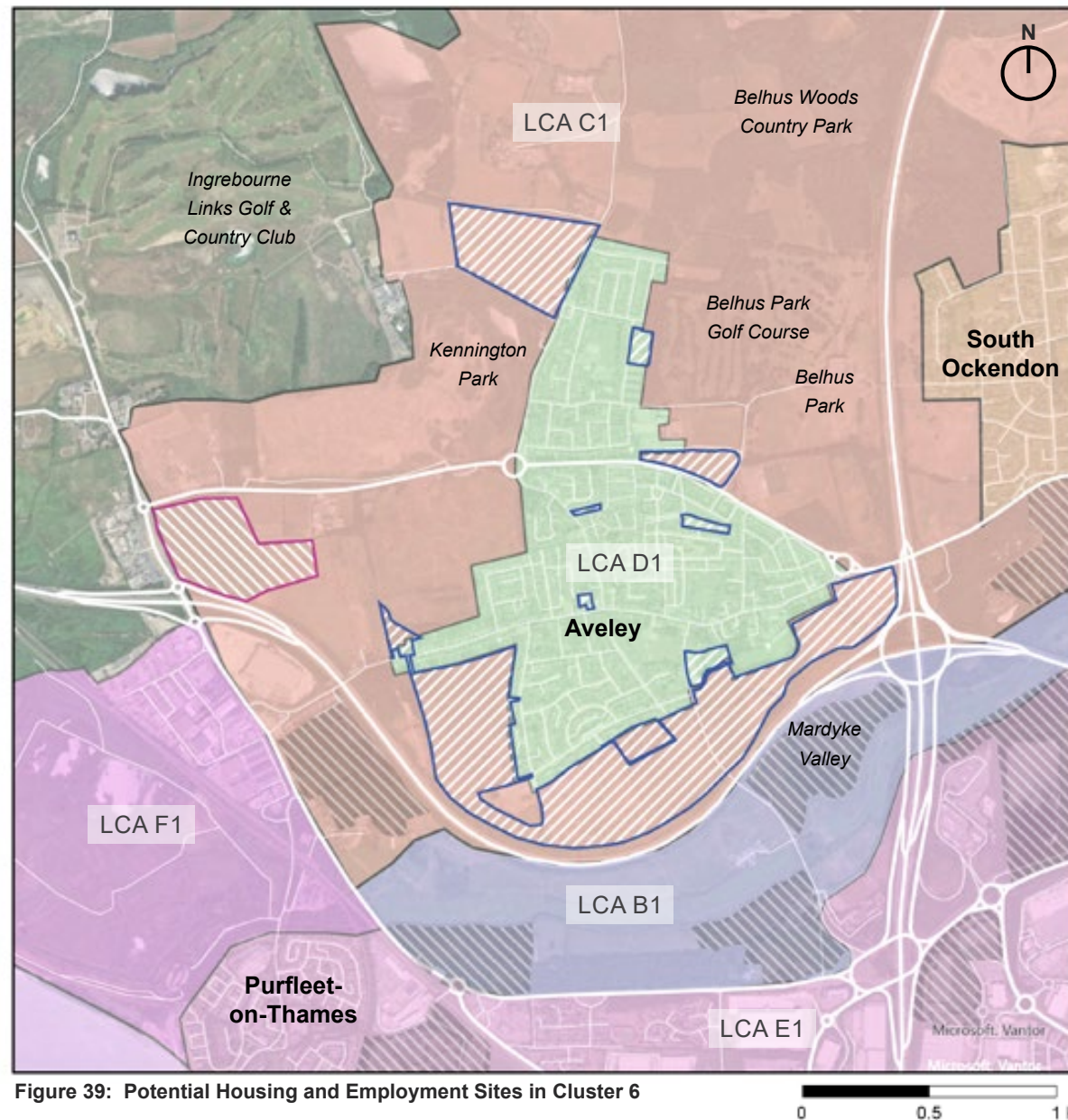


Figure 39: Potential Housing and Employment Sites in Cluster 6



4.6.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. The Mardyke River valley is located to the south of this cluster and is a key landscape feature for the area providing a sense of wildness and rurality, most of it designated as a Local Wildlife Site, home to several priority habitats, and containing a national cycle route. However, links from Aveley towards this green corridor are lacking. The **Aveley to Mardyke River link** opportunity promotes new connections to the Mardyke River valley from Aveley, leveraging existing blue infrastructure from the Scheduled Monument at St Michael's Church. The setting of the Scheduled Monument should also be conserved and enhanced as part of this opportunity.

The area to the south of Aveley is currently open landscape exposing the south of the settlement to the busy A13. The opportunity of **enhancing Aveley's rural landscape** promotes the establishment of new green infrastructure in this area, such as biodiverse farming or deciduous woodland belts that would simultaneously provide an accessible recreational feature for residents of south Aveley and a buffer to the A13 and establish a more intimate, wooded character more commonly found in northern parts of this LCA.

The north of Aveley benefits from two important features of landscape value: Belhus Woods Country Park and Kennington Park, a Local Wildlife Site. Development could contribute to an ecological and active travel connection in the **Belhus Woods-Kennington Park link** opportunity, also helping enhance the entrances and setting of these parks

through habitat creation. New woodland would provide a greater sense of enclosure in this area.

Development to the east of Aveley could also contribute to enhancing the sense of arrival in the **East Aveley-Belhus Woods Country Park** opportunity, thereby reinforcing the presence of and connection to Belhus Woods Country Park, an important landscape feature in this area.

Purfleet Road SSSI and Love Lane Local Wildlife Site are both located to the south-west of Aveley bordering the A13. The **Purfleet Road SSSI-Love Lane corridor** could help restore both the degraded SSSI site and the Local Wildlife Site by enhancing connectivity between the two, while also creating a buffer to the A13 for the residents of Aveley. PRow creation could complement the existing PRow network in the area by providing more circular connections around Aveley. A strong, connected belt of green infrastructure could emerge as a result of the two latter opportunities combining.

The M25 forms an imposing barrier between Aveley and South Ockendon. The **Stifford Road link** could help breach this barrier through PRow and habitat creation, which would minimise the negative impact the M25 has on the character of the area.

4.7.1 Overview

Sensitivities to development range from very low to medium. LCA E1 contains both residential clusters and industrial zones. The western half and south-eastern corner of the LCA is home to a relatively high concentration of residential properties, some with historical value, leading to higher sensitivities in these areas, compared to the central and north-eastern parts, which are dominated by industrial and commercial land use. LCA G1 is a cohesive landscape of intensive industrial use. However, its western corner is also adjacent to several residential areas. Its central zone contains several areas of biodiversity value and lies in proximity to the settlement of West Thurrock; sensitivities are likely to be higher in these parts of the LCA.

Legend

-  Potential Housing site within cluster
-  Potential Employment site within cluster
-  Other potential Housing/Employment sites outside cluster

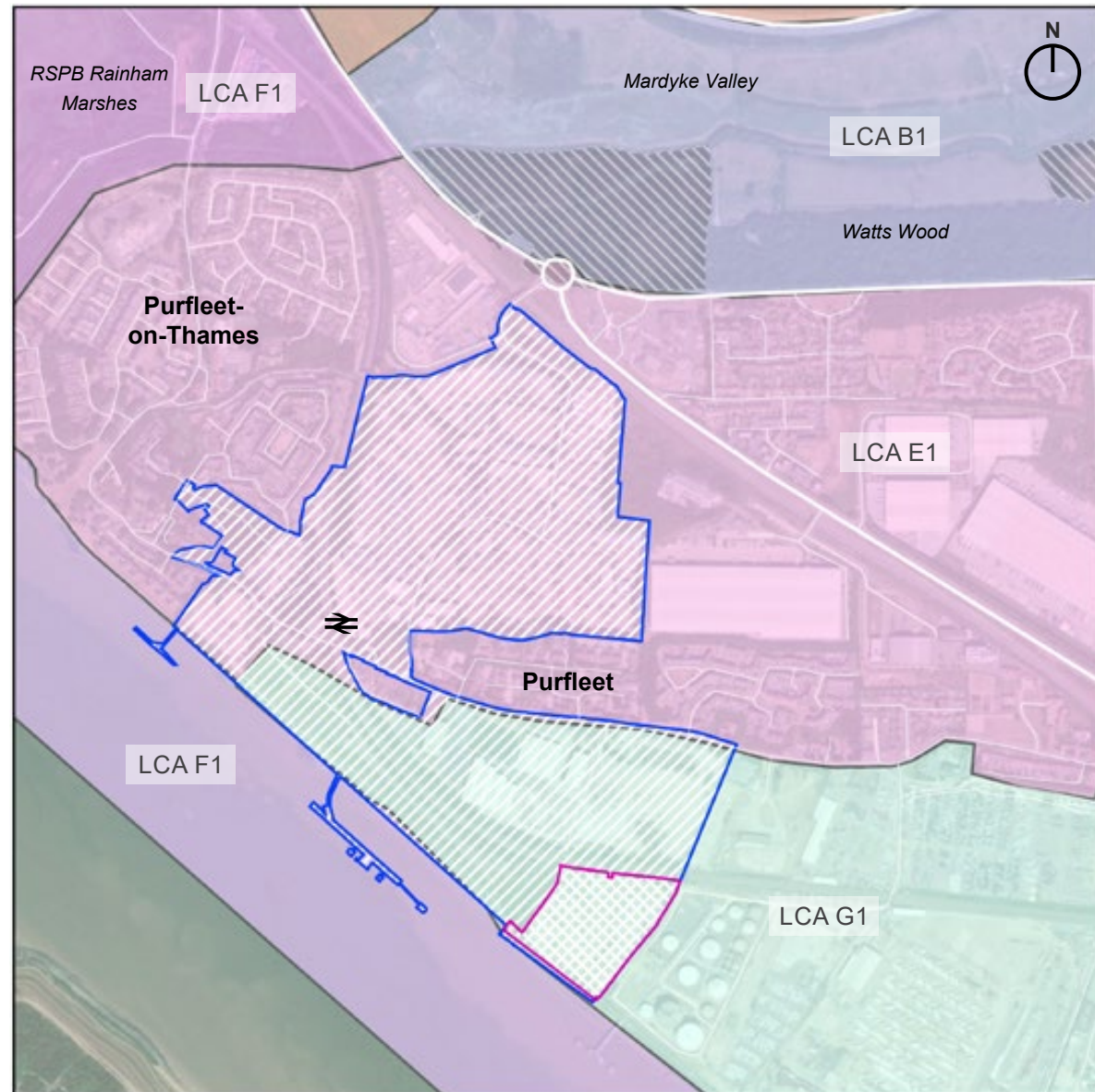


Figure 41: Potential Housing and Employment Sites in Cluster 7



4.7.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. A large area of Purfleet-on-Thames is a designated conservation area, with a few listed buildings around the settlement and Scheduled Monuments. The **Purfleet Conservation Area** opportunity should ensure new development preserves the setting of the conservation area, especially to the south of the settlement, and including that of listed buildings, thereby retaining its contribution to landscape character.

The **Purfleet riverside link** presents an opportunity to enhance connectivity along the river by connecting into the existing PRoW network, including the enhancement of the National Cycle Route. There is also an opportunity to enhance parts of the river edge, parts of which are designated priority habitat mudflats that extend towards Purfleet-on-Thames, and a Local Wildlife Site.

The **Purfleet Chalk Pits SSSI** opportunity promotes the preservation and enhancement of this valuable asset, which is a geological SSSI and Local Wildlife Site, a rare semi-natural space in this part of the LCA.

The **Purfleet habitat buffer** opportunity seeks to maintain and enhance the habitats that currently provide a buffer between residential and industrial areas, while also providing better ecological and recreational connections between the two areas.

4.8.1 Overview

This cluster comprises one site, located within the commercial complex of West Thurrock Marshes west of Chafford Hundred, in the western part of Thurrock. The site is mapped in Figure 43.

The site in this cluster is located within LCA E1: West Thurrock, Lakeside & Purfleet.

Sensitivities to development range from very low to medium. Sensitivities near the cluster, in the central part of the LCA, are likely to be relatively low due to the dominance of large-scale commercial and industrial development; the landscape features of value are generally found on the fringes, particularly in the south-west in and around Purfleet, the south-east near residential areas in West Thurrock, and the north-east near the Mardyke River valley. Sensitivities to development may be lower near the potential development site compared to other parts of the LCA.

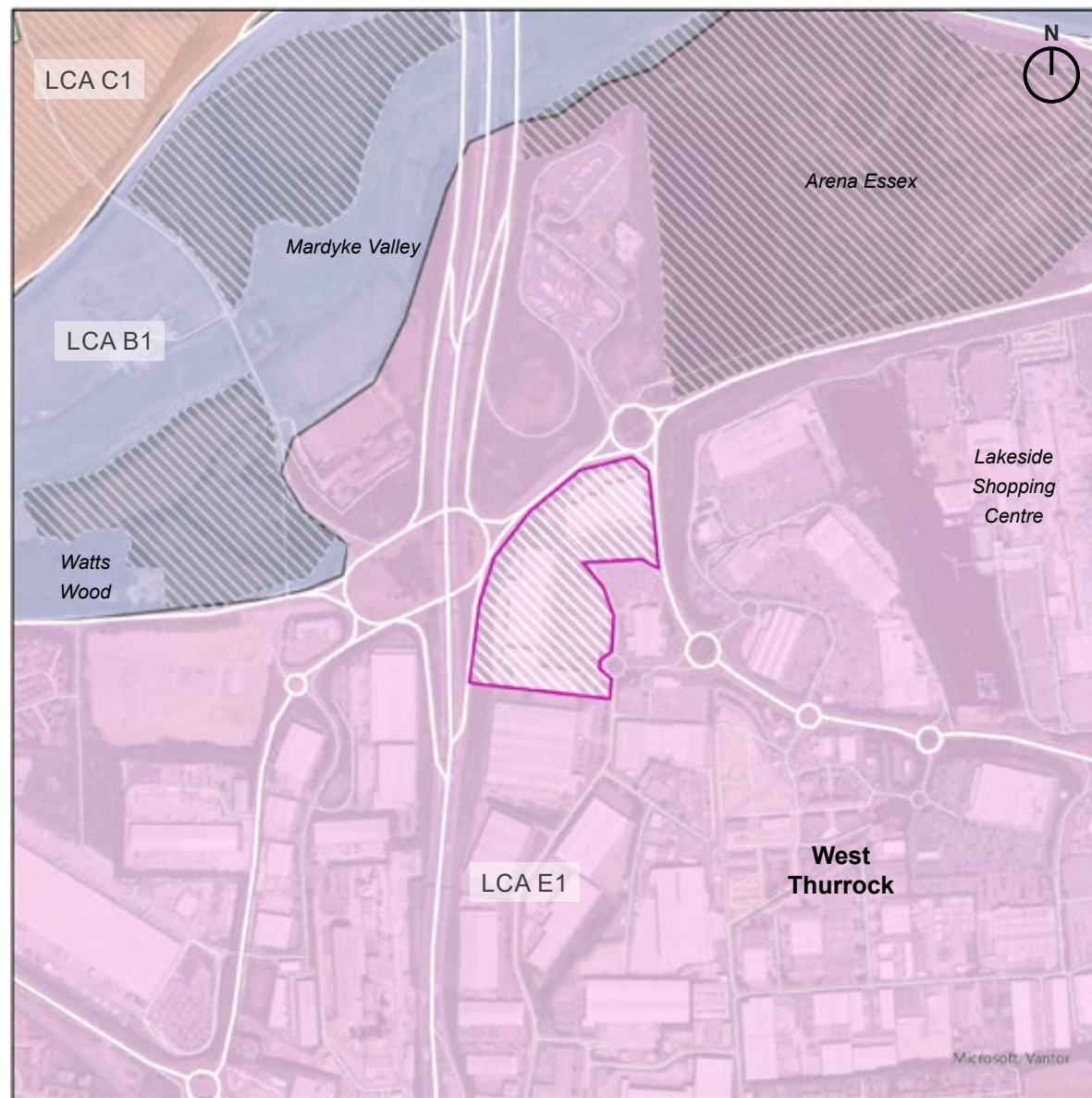


Figure 43: Potential Housing and Employment Sites in Cluster 8

Figure 44: Map of key opportunities for Cluster 8

4.8.2 Key opportunities for landscape integration

There are limited opportunities for new development to contribute to within this cluster. A small block of priority habitat deciduous woodland can be found to the north-east of the cluster. The **West Thurrock woodland link** opportunity promotes connections to this woodland from the cluster, which could be complemented by habitat creation. This could provide a larger strategic link to sites closer to the Mardyke River valley to the north.

4.9 Cluster 9: Mardyke River Valley

4.9.1 Overview

This cluster comprises seven sites, located in the western part of Thurrock, within the Mardyke River valley. The sites are mapped in Figure 45.

The sites in this cluster are located within
LCA B1: Lower Mardyke River Valley, LCA
C1: Belhus Farmed River Terrace Gravels and
LCA E1: West Thurrock, Lakeside & Purfleet.

Sensitivities to development range from very low to very high. All the sites lie adjacent to the highly valued Mardyke River valley and are therefore likely to have higher sensitivities, regardless of the summary sensitivities associated with each relevant LCA. In general, sensitivities are likely to increase nearer the river but remain high given the proximity to the valley.

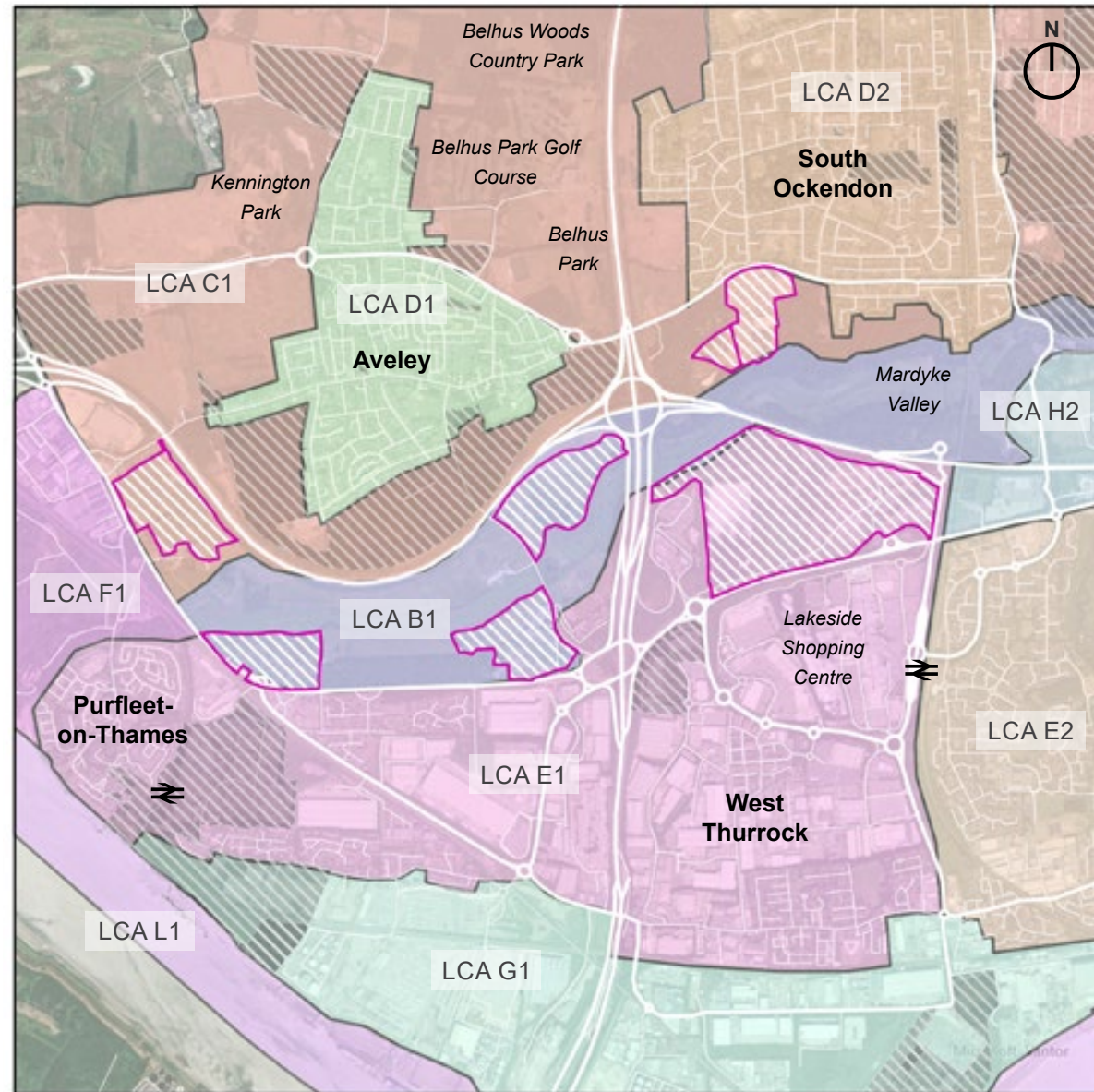
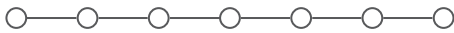


Figure 45: Potential Housing and Employment Sites in Cluster 9



4.9.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. **Enhancing the Mardyke River valley** presents an integrated opportunity to strengthen the character of this important landscape feature. PRoW creation could help connect surrounding residential neighbourhoods and increase connectivity through the valley, including cycle paths. The introduction of new farming landscapes such as biodiverse farming could leverage environmental stewardship land to the south of the A13 and Aveley. Interventions could include habitat creation of coastal floodplain and grazing marsh to connect into the existing priority habitat located within LCA B1. The Mardyke River and associated waterways could also be enhanced. This opportunity also aligns with Thurrock’s ambition of establishing the Mardyke Valley Country Park, as part of the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023).

Hangman Wood, Low Well Wood and Millard’s Garden and Brannett’s Wood are all areas of ancient woodland and should be conserved and protected. The **Millard’s Garden link** opportunity would, through the creation of a habitat corridor, link these blocks of ancient woodland to other areas of priority habitat and woodland, simultaneously creating new active travel links. Existing grazing marsh could also be enhanced alongside woodland belts with a continuous belt to the south of the Mardyke River and a smaller area of deciduous woodland to the north. These habitat improvements could help strengthen the sense of enclosure and rurality that the valley’s character provides.

The **Watts Wood link** is an opportunity to connect a series of Local Wildlife Sites and ancient woodland, which all contribute to landscape character, through habitat creation and enhancement and the establishment of new active travel routes.

The **Purfleet-Aveley link** presents the opportunity to enhance connections between residential neighbourhoods on either side of the Mardyke River valley and the A13.

4.10 Cluster 10: West Thurrock Marshes

4.10.1 Overview

This cluster comprises three sites, located within the industrial complex of West Thurrock Marshes along the River Thames, in the western part of Thurrock. The sites are mapped in Figure 47.

The site in this cluster is predominantly located within LCA G1: West Thurrock Marshes and a small area within LCA L1: Long Reach to Northfleet Hope.

Sensitivities to development are very low (development is not possible within LCA L1 because it does not contain developable land; sensitivities for this LCA have therefore been omitted). Sensitivity to development is likely to be relatively low in this cluster. However, the presence of a SSSI and a range of priority habitats near the cluster may result in higher sensitivities near these landscape features.

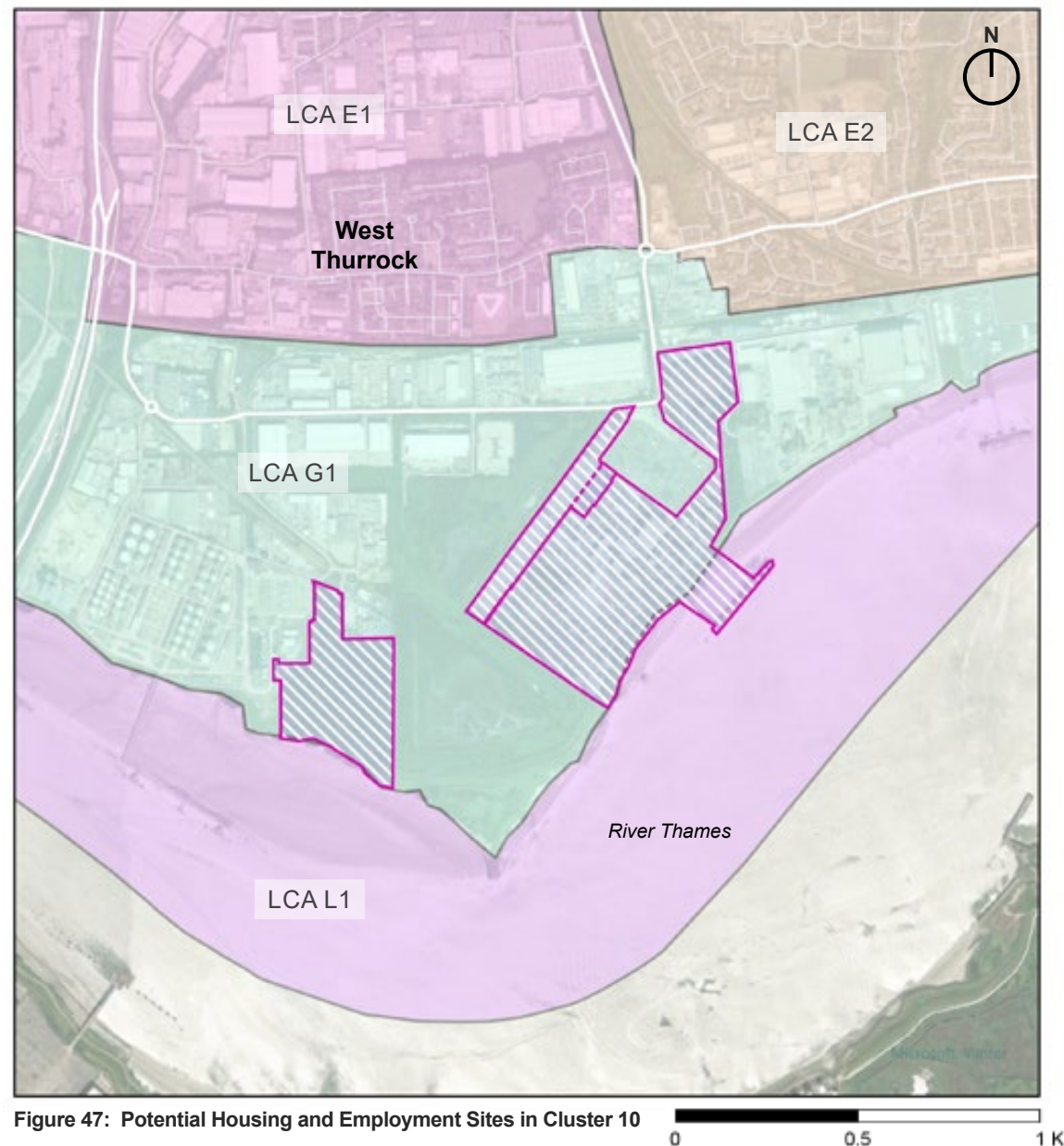
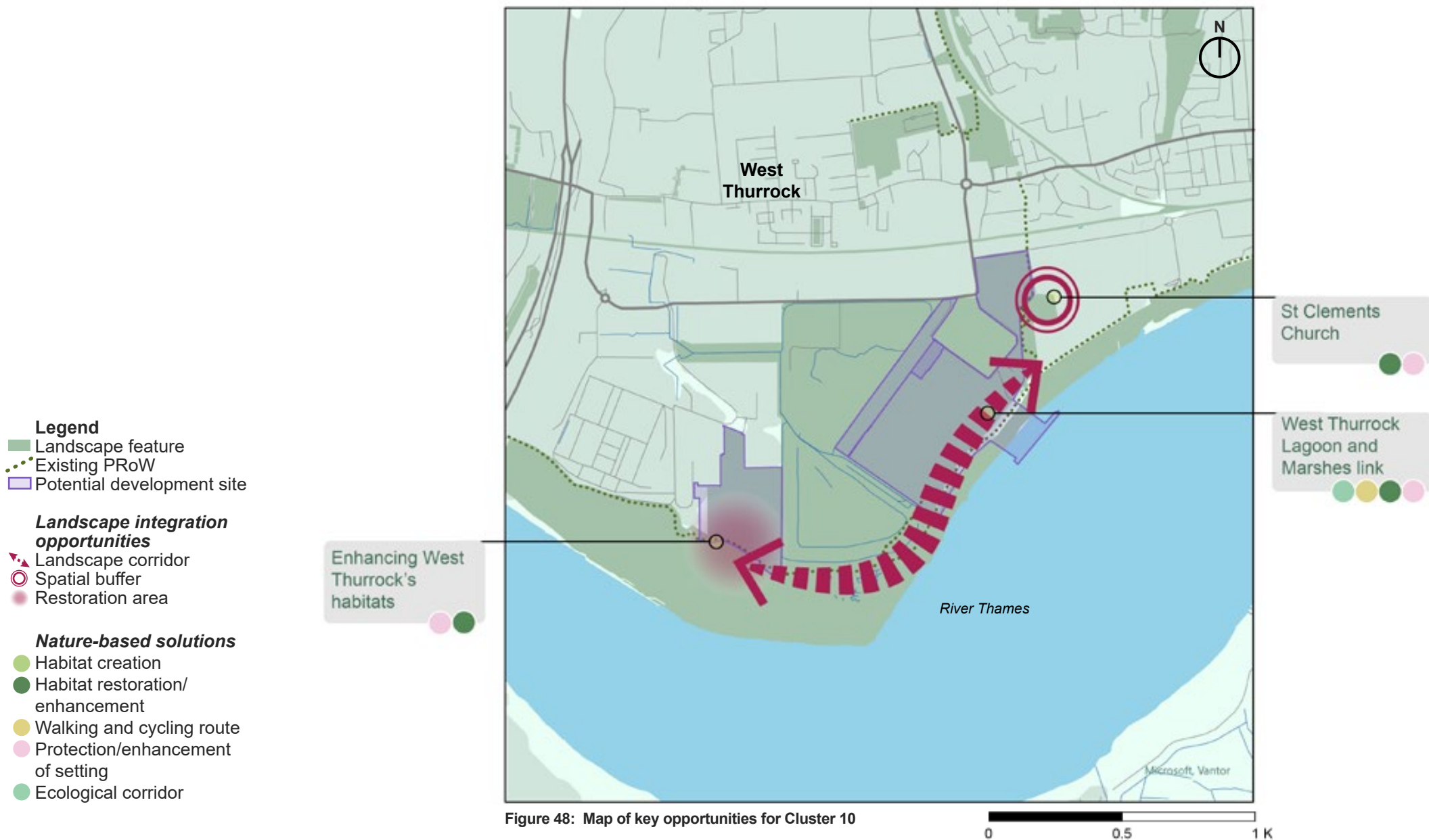
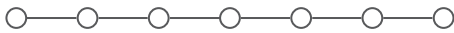


Figure 47: Potential Housing and Employment Sites in Cluster 10





4.10.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. The **West Thurrock Lagoon and Marshes link** would preserve the setting and views across the mudflats and river by creating an active travel and habitat corridor, building on the existing PRow network, connecting fragmented priority habitat and the West Thurrock Lagoon and Marshes SSSI, which is an important landscape feature in an area with few natural and semi-natural spaces.

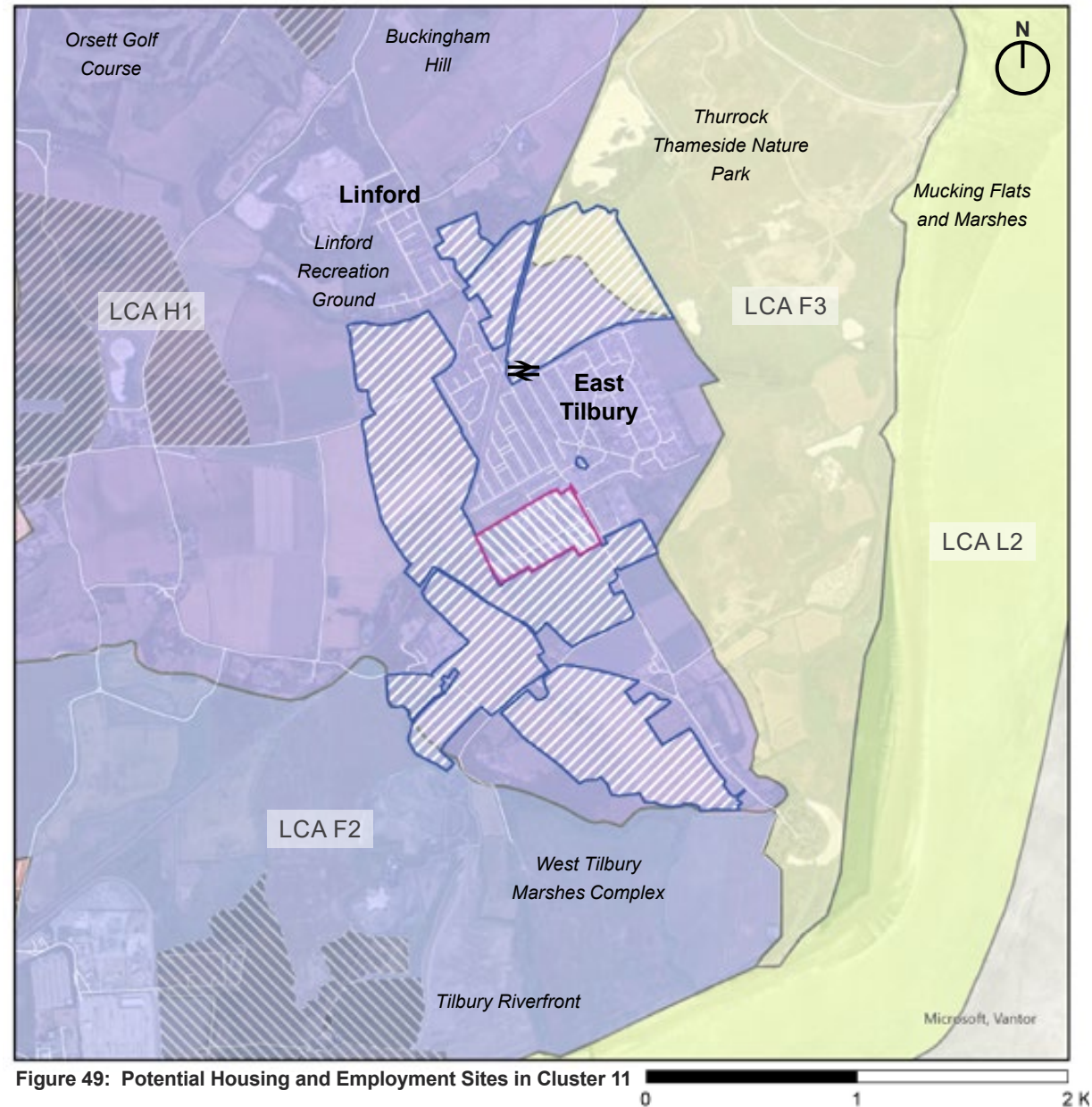
The **St Clements Church** opportunity seeks to promote preserving the setting of the Grade I listed church and its churchyard. It is a rare combination of heritage and habitat in an otherwise predominantly industrial setting, making it a distinctive and important asset.

Enhancing West Thurrock's habitats presents the opportunity to preserve and enhance priority habitats and the West Thurrock Brownfields Local Wildlife Site, strengthening their connection. Improving ecological connectivity would help contribute to enhancing the landscape character of the area.

This cluster comprises seven sites, located predominantly around the settlement of East Tilbury and within, in the southern part of Thurrock. These sites are mapped in Figure 49.

The site in this cluster is predominantly located within LCA H1: East & West Tilbury; small parts of the cluster are located in LCA F3: Mucking Marshes and LCA: F2 Tilbury Marshes.

Sensitivities to development range from medium to very high. Mucking Marshes and Tilbury Marshes are located to the east and south respectively and are home to a SSSI and Ramsar site. Sensitivities to development are likely to be relatively high due to the presence of these features. Sensitivity may also be higher to the north of East Tilbury due to the presence of Linford Wood Local Nature Reserve and the Thurrock Thameside Nature Park Local Wildlife Site. Sensitivities may be slightly lower to the west of East Tilbury and immediately south of the settlement.





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4.11.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. Within LCA H1, the open and exposed nature of the landscape allows for long distance views over the marshes, providing opportunities for views over the Thames Estuary. Preserving these views is important to maintain the character of the area; new development here should take this into consideration.

The **Thames Estuary and Marshes** opportunity seeks to connect the Thames Estuary and Marshes, a Special Protection Area, to other habitats, connecting fragmented patches of priority habitat and the Low Street Pit Local Wildlife Sites. These ecological connections will help strengthen the character of this area that is heavily influenced by marshland habitats and a sense of wildness in parts. This intervention could build on the existing PRow network and contribute to enhancing it. Designated sites should be treated with a spatial buffer in order to preserve their natural character.

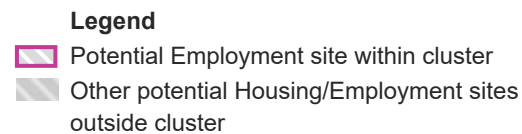
The **East Tilbury link** opportunity promotes better north-south connections between residential areas of East Tilbury and the landscape features to the south of the settlement.

Linford Wood & Thurrock Thameside Nature Park are both important landscape features to the north of East Tilbury. This opportunity promotes the

conservation of these assets as well as better active travel connections between them and East Tilbury. Their settings should be well considered by new development in order to maintain their semi-natural character.

A large part of East Tilbury lies within the East Tilbury Conservation Area, which also contains a few listed buildings around the settlement. The **East Tilbury Conservation Area** opportunity should ensure that new development maintains the character of the conservation area.

The area to the west of East Tilbury is characterised by arable fields. Some field boundaries in this LCA have experienced degradation over time. **Restoring East Tilbury's hedgerows** presents the opportunity to promote the restoration of hedgerows and field boundaries to restore this element of character of the LCA.





4.12.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA F2 predominantly consists of marshes, with large areas identified as Local Wildlife Sites, including West Tilbury Marshes Complex and Tilbury Riverfront. The **Tilbury Marshes link** presents an opportunity to preserve and enhance the setting of the LCA along the River Thames and views towards and across the river, while improving the quality of active travel here.

Large parts of the LCA in this area are designated as priority habitat, including coastal and floodplain grazing marsh and mudflats. **Enhancing Tilbury Marshes** presents the opportunity to restoration of these habitats in order to improve their condition. This intervention would help maintain the character of the marsh setting, which is a distinctive feature of this LCA.

This cluster comprises nine sites, located both within Tilbury and to the north of the settlement. These sites are mapped in Figure 53.

The sites in this cluster are predominantly located within LCA F2: Tilbury Marshes; some smaller sites are located within LCA H1: East & West Tilbury and LCA G3: Tilbury.

Sensitivities to development range from very low to high. These parts of LCA F2 and LCA H1 are located in close proximity to residential use and industrial uses, which may reduce sensitivities. However, a large part of the cluster is designated as a variety of priority habitats, which may increase sensitivity in these areas. Sites within Tilbury are likely to have lower sensitivity due to the more urban nature of the area.



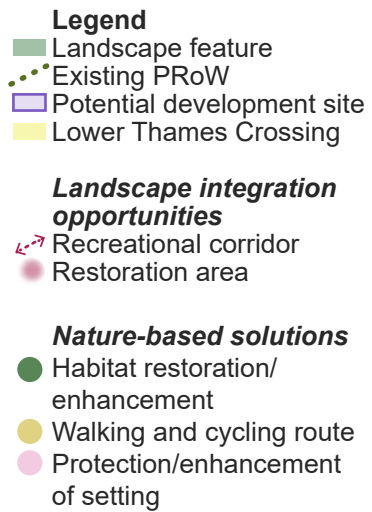


Figure 54: Map of key opportunities for Cluster 13

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4.13.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. Despite the industrial and urban surroundings, this area is home to several landscape features of note which combine to form an open expanse of undeveloped land. **Enhancing Tilbury's landscape** presents an opportunity to restore and enhance designated sites in the area so as to maintain the semi-natural character and important recreational function that these sites play for surrounding development. Ecological connectivity across these sites should be maintained.

The **Marshfoot Road link** presents an opportunity to improve active travel connections between Marshfoot Road to the north-west of LCA F2 towards Tilbury to the south.

Little Thurrock Reedbeds is a Local Wildlife Site and also an area of Priority Habitat consisting of coastal and floodplain grazing marsh. The **Dock Approach green link** would present an opportunity to enhance and preserve this area.

This cluster comprises two sites, located in the south-eastern corner of Grays and north of Tilbury Docks. These sites are mapped in Figure 55.

The site in this cluster is predominantly located within LCA F2: Tilbury Marshes and a very small part within both LCA E2: Grays, Chafford Hundred & South Stifford and LCA G2: Tilbury Docks.

Sensitivities to development range from very low to high. This part of LCA F2 is located in close proximity to residential use and industrial uses, which may reduce sensitivities compared to other parts of the LCA. However, almost the entire site is a Local Wildlife Site, increasing sensitivity.

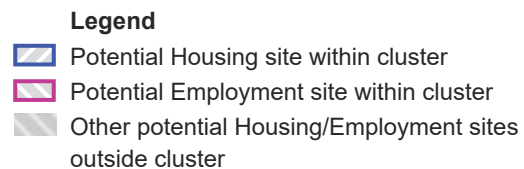


Figure 55: Potential Housing and Employment Sites in Cluster 14

Figure 56: Map of key opportunities for Cluster 14

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4.14.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. This area is dominated by residential and industrial uses, but some landscape features lie between development areas, helping maintain some separation and provide a sense of openness and rurality on the fringes of these area.

Enhancing Little Thurrock Marshes presents the opportunity to preserve and enhance these landscape features, including priority habitat coastal and floodplain grazing marsh and Little Thurrock Marshes, a Local Wildlife Site.

To the north-east of Little Thurrock Marshes lies Little Thurrock Reedbeds, which is also a Local Wildlife Site. The **Dock Road green link** would improve active travel and recreational connections between Little Thurrock Reedbeds and the priority habitat to the east of Dock Road.

4.15.1 Overview

The sites in this cluster are predominantly located within LCA H1: East & West Tilbury, and small areas within LCA I1: Chadwell St Mary.

Sensitivities to development range from very low to high. Sites within Chadwell St Mary are likely to have lower sensitivity to development due to the more urban character of the area. Certain landscape features are located to the south and south-east of Chadwell St Mary, including Hob Hill & Sandy Lane Pit, a Local Wildlife Site, and West Tilbury Conservation Area; the presence of these features may increase sensitivity. The presence of the A1089 to the west may reduce sensitivities to development within this part of the LCA.

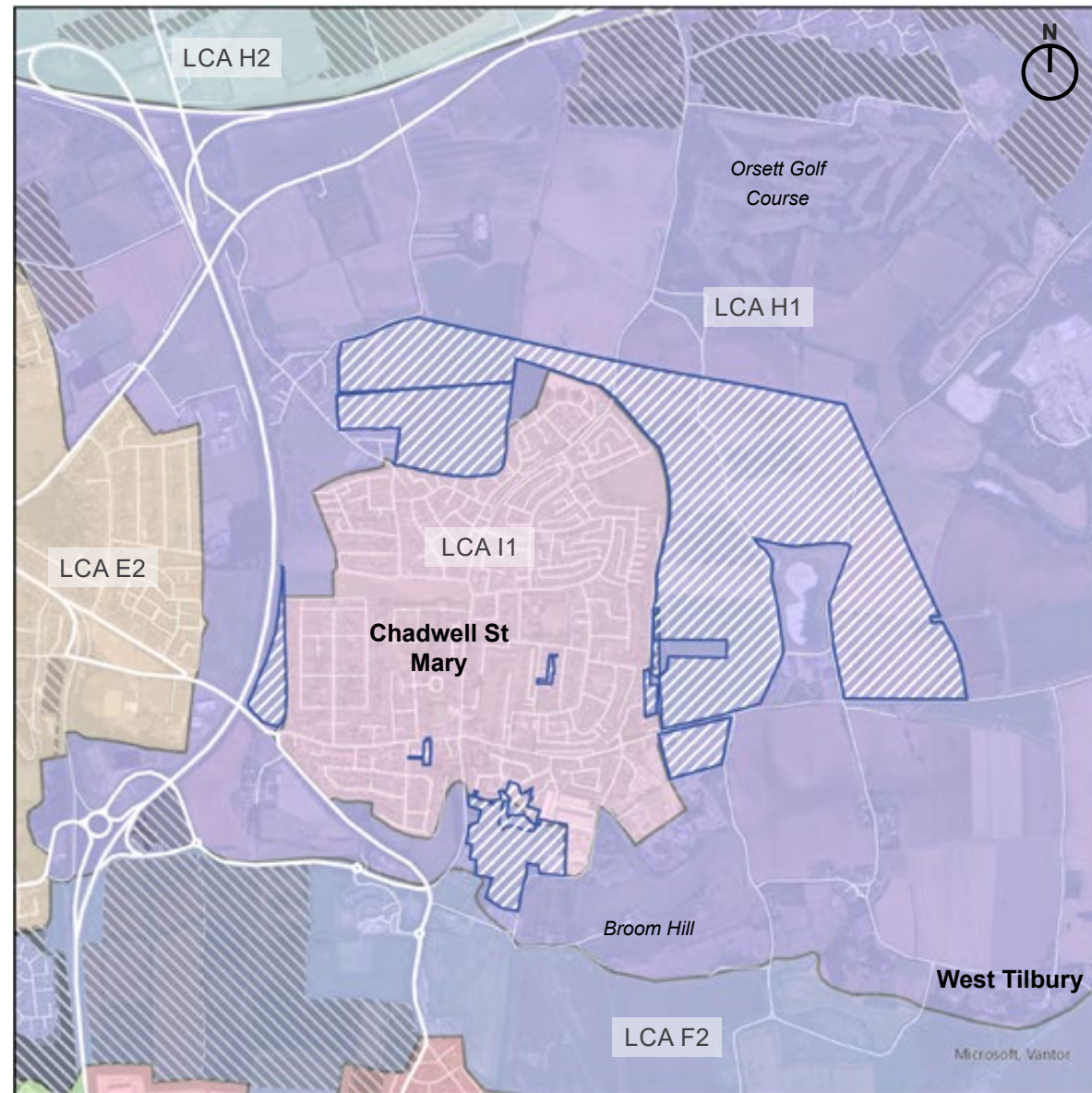


Figure 57: Potential Housing and Employment Sites in Cluster 15



4.15.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA H1 consists of an undulating semi-rural landscape and includes the settlement of Chadwell St Mary. To the north of the settlement, an area of priority habitat deciduous woodland provides recreational value for nearby residents. The **North Chadwell St Mary woodland** opportunity seeks to maintain and enhance the woodland and its setting.

The **Dock Approach Road woodland creation** opportunity seeks to create a habitat buffer to the A1089 to the west of Chadwell St Mary. The **Chadwell Wood link** opportunity couldn connect Chadwell Wood, an area of ancient woodland located to the west of Chadwell St Mary, to the former opportunity. Despite the barrier of the A1089, the Chadwell Wood link could help provide a recreational link to the south, whilst also supporting a proposed green link identified in the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) that coincides with this area.

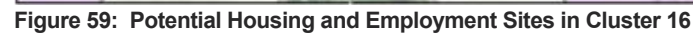
West Tilbury Conservation Area should be conserved and enhanced. To the north of the conservation area, a proposed green link identified as part of the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) could connect into this opportunity.

To the south of Chadwell St Mary are fragmented areas of priority habitat deciduous woodland as well

as the **Hob Hill and Sandy Lane Pit Local Wildlife Sites**. There is an opportunity to connect these habitats through habitat creation and enhancement.

This cluster comprises 12 sites, located within the settlement of Grays, in the central part of Thurrock. These sites are mapped in Figure 59.

Sensitivities to development range from very low to medium. There are few landscape features within this LCA as the sites are located within a more urban environment; sensitivity to development is therefore likely to be relatively low. The western part of the cluster is near a higher concentration of landscape features such as Grays Thurrock Chalk Pit SSSI; sites in close proximity to this feature may have high sensitivities.



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4.16.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA E2 is heavily dominated by residential development. However, the LCA also contains several SSSI designations, namely the **Grays Thurrock Chalk Pit**. New development should preserve this important feature and its setting. Other small natural / semi-natural sites in this LCA should be considered in the same way.

A few fragmented areas of priority habitat consisting of deciduous woodland are located to the south-east of LCA E2. The **Dock Approach woodland link** presents an opportunity to extend a new woodland belt to the south in LCA H1 through habitat creation.

The **South Stifford woodland creation** presents an opportunity for habitat creation, strengthening a smaller block of woodland designated as priority habitat to create a larger area of woodland. Similarly the **Orsett Road woodland creation** opportunity would connect smaller areas of fragmented deciduous woodland designated as priority habitat, through habitat creation and enhancement.

This cluster comprises three sites, located in the London Gateway Port development, in the eastern part of Thurrock. These sites are mapped in Figure 61.

The sites in this cluster are predominantly located within LCA G4: London Gateway Port, with a small part of the cluster located in LCA: F4 Fobbing Marshes and Haven Creek.

Sensitivities to development range from very low to very high. The dominance of industry within LCA G4 results in low sensitivities to development; this means that sites that fall within LCA F4 in close proximity to this area are likely to have lower sensitivities than other parts of the LCA. This is likely to be the case in the south-western corner of LCA F4. However, the Holehaven Creek SSSI to the north of the cluster is likely to increase sensitivities. The whole of LCA F4 is within the Essex Coast Environmentally Sensitive Area, which is likely to increase sensitivity here.

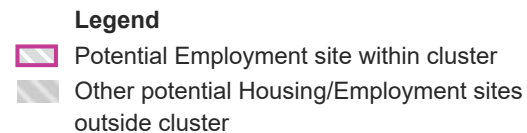
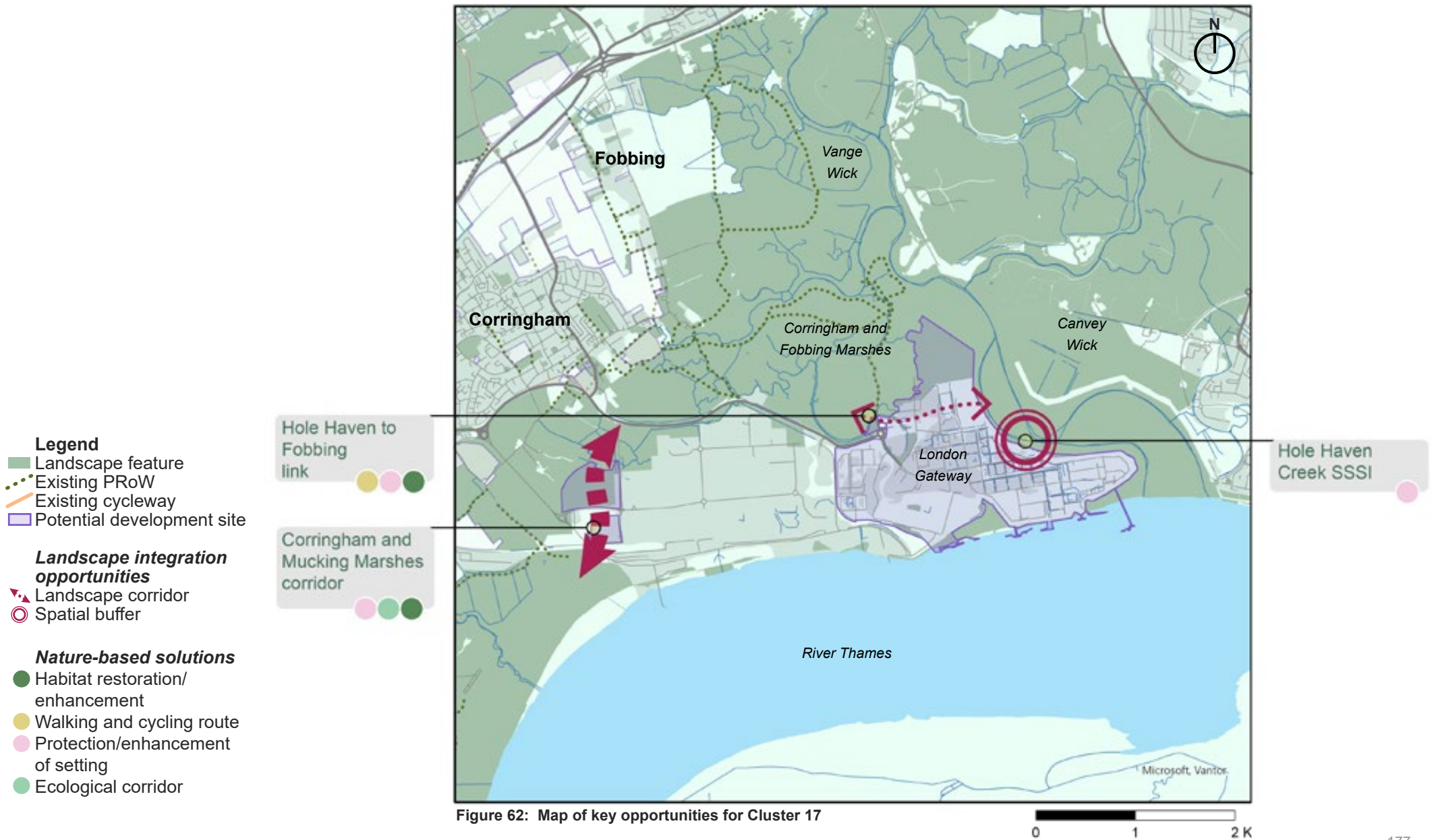


Figure 61: Potential Housing and Employment Sites in Cluster 17



4.17.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. Corringham and Fobbing Marshes, located in LCA F4, is a Local Wildlife Site and comprises priority habitat. The **Corringham and Mucking Marshes corridor** would preserve existing habitats as well as strengthen ecological connectivity between Corringham and Fobbing Marshes and the Thames Estuary. This intervention would enhance the presence of marshland habitats, which form a distinctive part of the character of the landscape. A proposed green link identified as part of the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) passes through the south-west of LCA F4, which could tie into this opportunity.

The **Hole Haven Creek SSSI** is centred on Hole Haven Creek and is a distinctive feature of this LCA. This designation and its setting should be conserved with a spatial buffer and enhanced where possible.

There is a lack of active travel routes and footpaths in this area as the area is dominated by private land, with no access in and around both the London Gateway Port and along the river. Industrial development also separates certain habitats. The **Hole Haven to Fobbing link** would allow for a better connection between areas of priority habitat including mudflats, coastal floodplain and grazing marsh and coastal saltmarsh, strengthening the presence and accessibility of these valued landscape features.

4.18.1 Overview

The sites in this cluster are located within LCA H1: East & West Tilbury.

Sensitivities to development range from medium to high. There is a higher number of landscape features south of the cluster, such as the Mucking Heath Complex, a Local Wildlife Site, and a Scheduled Monument. This may result in higher sensitivity to development nearby. North of the cluster, the A13 forms a barrier and detractor of landscape character, leading to lower sensitivities to development.

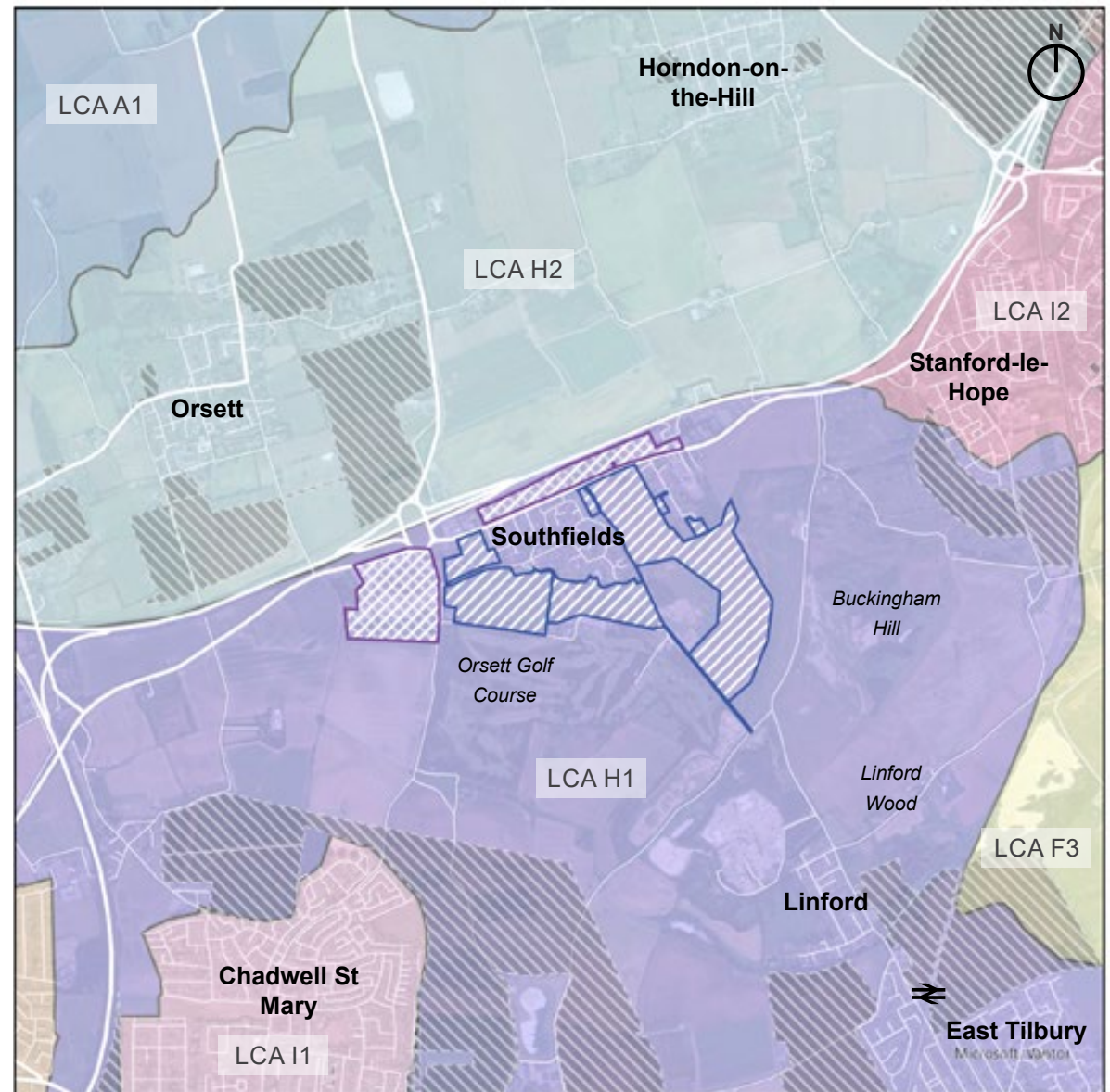


Figure 63: Potential Housing and Employment Sites in Cluster 18

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4.18.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA H1 is a semi-rural area containing small settlements. Both Mucking Heath Complex and Buckingham Hill are Local Wildlife Sites. **Enhancing Southfields' rural landscape** seeks to restore degraded parts of the landscape. This could include restoring hedgerow field boundaries and woodland creation in order to restore the historic character of this LCA based on a more diverse pattern of smaller fields. New development should respect and retain views across the neighbouring marshes and the Thames Estuary, which are characteristic of this area.

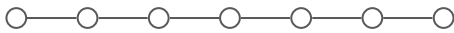
A **habitat buffer to the A13** could help enhance the sense of rurality of the area by minimising the negative impact on the landscape of the A13 road to the north of Southfields.

This cluster comprises 26 sites, located in and around the settlements of Stanford-le-Hope and Corringham, in the eastern part of Thurrock. These sites are mapped in Figure 65.

The sites in this cluster are predominantly located within LCA J1: Langdon Lower Hill Slopes, and a small part of the following landscape character areas: LCA H3: Fobbing Ridge, LCA I2: Stanford-le-Hope & Corringham and LCA H1: East & West Tilbury.

Sensitivities to development range from very low to high. Despite the relatively high sensitivities to development in LCA J1, sites in the north of the cluster located within this LCA are likely to have lower sensitivity due to their proximity to Corringham and the A13. Sites adjacent to Fobbing Conservation Area are however likely to have higher sensitivities. Sites to the south and east of Stanford-le-Hope are likely to have higher sensitivities due to their proximity to Mucking Marshes and Fobbing Marshes.





4.19.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA H1 primarily comprises agricultural land, with sites in this cluster located to the north-east. LCA H3 is mainly characterised by large arable fields with some areas of wet grassland; sites to the south of this landscape character area are adjacent to a range of priority habitats, including reedbeds and coastal and floodplain grazing marsh forming Mucking Creek, a Local Wildlife Site. Buckingham Hill located to the north-east of LCA H1, is also a Local Wildlife Site. The **Mucking Creek to Buckingham Hill link** presents an opportunity to create a habitat corridor to connect fragmented habitats. Two proposed green links, identified as part of the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023) pass through the southern part of the cluster. There is an opportunity to tie these green links into the habitat corridor, enhancing the character and accessibility of the landscape.

The public right of way network is generally well connected in this area, though the creation of the **Corringham active travel route** from Corringham towards the east would provide greater recreational access towards Fobbing Marshes.

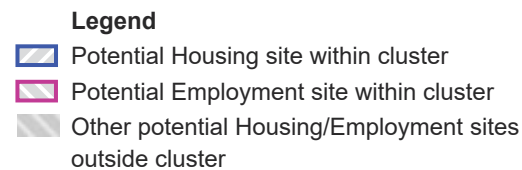
Corringham and Fobbing Marshes is a Local Wildlife Site and consists of a range of priority habitats, predominantly located within LCA F4 and a small area of LCA H3. The **Fobbing Marshes link** presents an opportunity to preserve and enhance existing habitat and create new habitat extending north and north-west into LCA J1. It would also enable a connection between two green links proposed as part of the ‘Thurrock Green & Blue Infrastructure Strategy’

(LUC, 2023), one to the south passing through LCA F4 and the other passing from LCA I2 across the A13 to LCA J1. The link could help connect fragmented areas of deciduous woodland while providing accessible woodland in this area.

There is an opportunity to create a **habitat buffer along the A13** through habitat enhancement and creation, which could help enhance a sense of rurality in this area.

This cluster comprises seven sites, located in the eastern part of Thurrock, north of the A13 at the foot of the Langdon Hills. These sites are mapped in Figure 67.

Sensitivities to development are medium to very high. Sites adjacent to LCA K1 are likely to have higher sensitivities to development than other parts of the LCA as there are a relatively high number of valuable landscape features in this location, such as a SSSI and ancient woodland, with some areas of priority habitat located within the sites. Parts of the cluster near the A13 are likely to have lower sensitivity. Sites within the eastern part of LCA H2 are also likely to have a slightly lower sensitivity as there are lower concentrations of landscape features within or adjacent to them, although views towards the Langdon Hills may lead to increased sensitivity.



0 1 2K



4.20.2 Key opportunities for landscape integration

There are several opportunities that new development could contribute to within this cluster. LCA J1 predominantly consists of agricultural fields with hedgerows providing a strong landscape structure across the area. Langdon Hills Country Park is located to the north of the cluster which two of the sites are adjacent to and contains areas of priority habitat, including deciduous woodland and some blocks of ancient woodland. A large area of the country park is also designated as the **Langdon Ridge SSSI**, which presents the opportunity to preserve both its setting and long-ranging views from field gates and footpath junctions. This can include Hawksbury Grasslands, a Local Wildlife Site, adjacent to Langdon Ridge SSSI.

Restoring the Langdon Hills presents an opportunity to enhance areas of hedgerow where there are some gaps to provide better habitat connectivity, as well as create new habitats, such as extending the areas of woodland in the Langdon Hills to the south.

The **Langdon Hills green links** opportunity aligns with the Corringham to Langdon Hills Country Park proposed green link, as part of the ‘Thurrock Green & Blue Infrastructure Strategy’ (LUC, 2023), spanning LCA I2, LCA J1 and LCA K1. Whilst the A13 to the south of the cluster fragments the landscape, there is an opportunity to ameliorate both ecological and recreational connections to Lodge Hall Shaw, a Local Wildlife Site, and strengthen existing connections towards the Langdon Hills Country Park, Northlands Wood and beyond, including an existing cycleway that runs northwards to Basildon.

The **Langdon Hills golf club active travel link** presents an opportunity to create a more direct route connecting into the existing public right of way network towards Langdon Hills Country Park.

The **Horndon-on-the-Hill Conservation Area** includes a number of listed buildings within the settlement. New development should ensure the setting of the conservation area and the listed buildings are preserved.



SECTION 5

Part C - Nature-based solutions compendium

5.1 Nature-based solutions compendium

This section lays out the NbS interventions that are applicable within the Thurrock context, accompanied by a description of the intervention and a contextually relevant case study.

Habitat creation



Description

- Establishing new areas of habitat that previously did not exist or have changed to a different typology of habitat over time.
- Typically used within degraded areas of land or land that has experienced substantial modification by human activity.
- Seeks to support and increase biodiversity and improve the overall health of the ecosystem.
- Can be used to reinforce landscape character that is defined by certain types of distinctive habitat.



Woodland creation as part of the Essex Forest Initiative © Essex County Council

Habitat restoration / enhancement



Description

- Improving the condition and quality of habitats that may still exist in an area but have since degraded over time.
- Typically used within degraded areas of land or land that has experienced substantial modification by human activity. Includes water-based habitats.
- Seeks to improve the quality of habitats and their features.
- Can be used to reinforce landscape character that is defined by certain types of distinctive habitat.



Saltmarsh restoration, RSPB Wallasea Island Wild Coast, Essex © MSN News

Walking and cycling route creation / enhancement



Description

- Creating new active travel routes and/or enhancing existing ones to provide accessible connections to and between key landscape features, including parks, semi-natural spaces, natural spaces and settlements.
- Should respond to existing active travel networks in order to enhance connectivity across the landscape overall.
- Some interventions of this nature may present opportunities to be combined with habitat creation or restoration / enhancement and recreational feature creation / enhancement.



Footpath creation in Rainham Marshes RSPB © RSPB

Recreational feature creation / enhancement



Description

- Enhancement of recreational spaces and facilities to improve their quality, accessibility and visual appeal.
- This intervention should ideally be used in conjunction with improvements in active travel connections and should seek to maintain the character of the surrounding landscape



Thameside Nature Discovery Park, Essex © David Levene / The Guardian

Protection / enhancement of setting



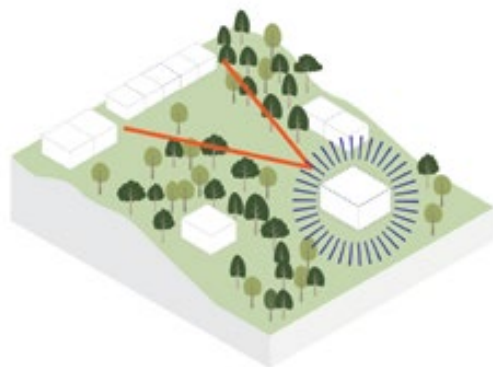
Description

- Preserving the context of landscape features, including heritage assets, to ensure the character of the surrounding landscape is protected and in certain cases enhanced.
- This intervention can be achieved by establishing spatial buffers around landscape features of value, or in conjunction with other interventions, such as protecting / enhancing views or habitat restoration / enhancement.



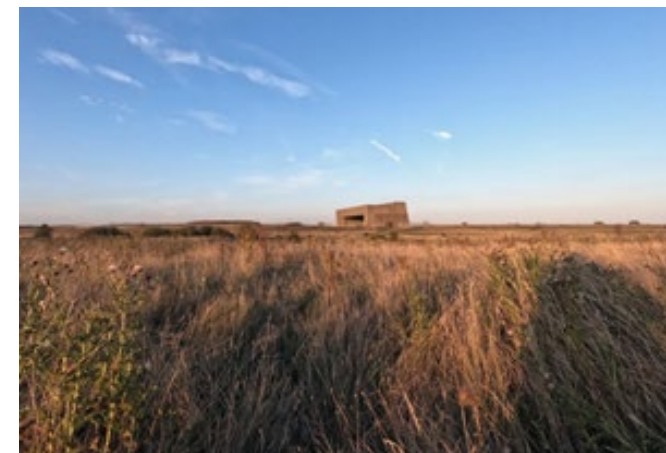
Coalhouse Fort and Coalhouse Fort Park, Essex © Web Aviation

● Protection / enhancement of views



Description

- Preserving, enhancing or restoring certain views to and from landscape features of value, or of wide / long distance views that contribute to the character of the landscape.
- This intervention may be achieved through the consideration of certain views that play an important role in defining the character of the landscape, such as by restoring intimate views and a sense of enclosure, or by preserving certain long-distance views.



Open views across Fobbing Marshes, Essex © Ian Tokelove

● Ecological corridor



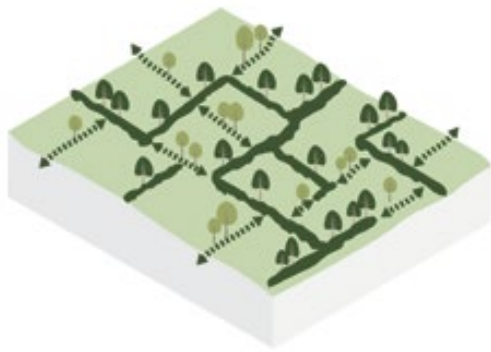
Description

- Preserving, enhancing, restoring or creating key ecological links between habitats.
- Similar to habitat restoration / habitat creation, or to be used in conjunction with these interventions.
- Seeks to create / enhance ecological connectivity by connecting isolated habitats, resulting in more resilient ecosystems and contributing to a more cohesive landscape.



Establishment of woodland corridors, Iford Biodiversity Project, South Downs © Natural England

● Hedgerow enhancement

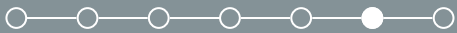


Description

- Improving the condition of hedgerows by filling in gaps within existing hedgerow network or reintroducing new hedgerows.
- Seeks to increase habitat connectivity and enhance landscape character.
- Can be used to restore historic field patterns that contributed to landscape character.
- This intervention can be used in conjunction with improvements in active travel connections.



Hedgerow restoration, Hampshire © South East Farmer



SECTION 6

Appendices

6.2 Appendix B - Landscape sensitivity table

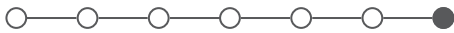
LCA Name	Value	SENSITIVITY							
		Very large Housing Area	Large Housing Area	Substantial Housing Area	Small Housing Area	Minor Housing	Flats	Major Warehouse / Industry	Lorry parks
		Over 3,000 dwellings (over 100Ha)	1,000 to 2,999 dwellings (33 to 100Ha)	300 to 999 dwellings (11 to 33Ha)	75 to 299 dwellings (2.5 to 11Ha)	Under 75 dwellings (or under 2.5Ha)			
A1: Bulphan Fenland	Medium	High	High	High	Medium	Medium	High	High	High
B1: Lower Mar Dyke River Valley	High	n/a	n/a	Very high	Very high	High	Very high	Very high	Very high
C1: Belhus Farmed River Terrace Gravels	Medium	High	High	High	Medium	Medium	High	High	High
D1: Aveley	Low	n/a	n/a	Medium	Low	Very low	Medium	Medium	n/a
D2: South Ockendon	Low	n/a	n/a	Medium	Low	Very low	Medium	Medium	n/a
E1: West Thurrock, Lakeside & Purfleet	Low	n/a	Low	Low	Very low	Very low	Medium	Medium	Medium
E2: Grays, Chafford Hundred & South Stifford	Low	n/a	Low	Low	Very low	Very low	Medium	Medium	Medium
F1: Aveley Marshes	High	Very high	Very high	Very high	High	High	Very high	Very high	Very high
F2: Tilbury Marshes	Medium	High	High	High	Medium	Medium	High	Medium	Medium
F3: Mucking Marshes	High	Very high	Very high	Very high	High	High	Very high	Very high	Very high
F4: Fobbing Marshes & Haven Creek	High	Very high	Very high	Very high	Very high	Very high	Very high	Very high	Very high
G1: West Thurrock Marshes	Very Low	Very low	Very low	Very low	Very low	Very low	Very low	Very low	Very low
G2: Tilbury Docks	Very Low	Very low	Very low	Very low	Very low	Very low	Very low	Very low	Very low
G3: Tilbury	Low	n/a	n/a	n/a	Low	Very low	Medium	Medium	Medium
G4: London Gateway Port	Very Low	Very low	Very low	Very low	Very low	Very low	Very low	Very low	Very low
H1: East & West Tilbury	Medium	High	High	High	Medium	Medium	High	High	High
H2: Orsett and Horndon on the Hill	Medium	High	High	High	High	Medium	High	High	High
H3: Fobbing Ridge	Medium	High	High	High	High	Medium	High	High	High
I1: Chadwell St Mary	Low	n/a	n/a	n/a	Low	Very low	Medium	n/a	n/a
I2: Stanford le Hope and Corringham	Low	n/a	n/a	n/a	Low	Very low	Medium	n/a	n/a
J1: Langdon Lower Hill Slopes	Medium	High	High	High	Medium	Medium	High	High	High
K1: Langdon Higher Hills	High	Very high	Very high	Very high	Very high	High	Very high	Very high	Very high
L1: Long Reach to Northfleet Hope	N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
L2: Gravesend Reach to Sea Reach	N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Susceptibility ↓ / Value →	Very High Value	High Value	Medium Value	Low Value	Very Low Value
Very High Susceptibility	Very high	Very high	High	Medium	Medium
High Susceptibility	Very high	High	High	Medium	Medium
Medium Susceptibility	High	High	Medium	Medium	Low
Low Susceptibility	High	Medium	Medium	Low	Very low
Very Low Susceptibility	Medium	Medium	Low	Very low	Very low



SECTION 7

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