Landscape Sensitivity Assessment

Renewable Energy Development

City of Edinburgh Council

Final report
Prepared by LUC
February 2026

Version	Status	Prepared	Checked	Approved	Date
1	Partial Draft	LUC	LUC	LUC	28/11/2025
2	Full Draft	LUC	LUC	LUC	05/02/2026
3	Final Report	LUC	LUC	LUC	27/02/2026

EMS566057 FS566056 OHS627041

Land Use Consultants Limited
Registered in England. Registered number 2549296. Registered office: 250 Waterloo Road, London SE1 8RD. Printed on 100% recycled paper

Contents

Acknowledgements
LUC would like to thank the Planning and Building Standards team at the City of Edinburgh Council for their inputs.

Chapter 1
Introduction

Background to this study

1.1 In September 2025, LUC was commissioned by the City of Edinburgh Council to prepare a Landscape Sensitivity Assessment (LSA) for wind energy, solar photovoltaic (PV) and battery energy storage system (BESS) development. This LSA provides judgements on the sensitivity of the landscape within the City of Edinburgh Council area to these types of development. The findings of this assessment will help to realise the potential opportunities for renewable energy within the Council area and guide renewable energy developments to less sensitive parts of the landscape, with consideration given to appropriate design mitigation.

1.2 The study is focused on landscape considerations for renewable energy development. There will be other factors and considerations, including those set out in relevant national policy, which will influence identification and implementation of opportunities for renewable energy development. The study assesses sensitivity based on broad areas of landscape with shared characteristics, but within this variation to sensitivity may occur at a local level.

1.3 The method used is described in Chapter 2 and broad results and guidance presented in Chapter 3.

1.4 The study is based on the description and classification of the landscape presented in the updated City of Edinburgh Council's 2026 Edinburgh Landscape Character Assessment. This provides a characterisation of the local authority into broad landscape character types and more detailed landscape character areas. The relative sensitivity of each of the defined landscape character types was assessed. Landscape character does not change at administrative boundaries, or at fixed lines on the ground, and the study therefore considers the adjoining areas of landscape within West Lothian, Midlothian, East Lothian and the Scottish Borders. In practice, changes in landscape character are transitional.

1.5 This study also reflects the findings of the updated City of Edinburgh Council's 2026 Local Landscape Designation Review, which identifies 21 areas which are considered to meet the criteria for local landscape designation.

Policy context

European Landscape Convention

1.6 The European Landscape Convention (ELC) came into force in the UK in March 2007. It established the need to recognise landscape in law; and develop landscape policies dedicated to the protection, management, and planning of landscape; and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. The ELC remains relevant despite the UK's departure from the EU.

1.7 The ELC definition of 'landscape' recognises that all landscape matters, be it ordinary, degraded, or outstanding:

> *"Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."*

1.8 Signing up to the ELC means that the UK is committed to protect, manage, and plan our landscape for the future. Landscape character is defined in the Guidelines for Landscape and Visual Impact Assessment – 3rd Edition (GLVIA3) as *"a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse"*. Again, this reinforces the underlying message and commitment in the UK that all landscape matters. The Convention also advocates work to raise landscape awareness, involvement and enjoyment amongst local and visiting communities.

Development Plan policy context

National Planning Framework 4 (NPF4)

1.9 This assessment will provide evidence to inform the preparation of the next local development plan, City Plan 2040, in alignment with the Scottish Government's 2023 National Planning Framework 4 (NPF4). The assessment also reflects the information planning authorities may wish to prepare, as outlined in the Scottish Government's 2023 Local Development Planning Guidance.

1.10 NPF4 strongly supports the principle of renewable energy, with the policy intent of Policy 11 *"to encourage, promote and facilitate all forms of renewable energy*

development onshore and offshore", with the exception of *"wind farms in National Parks and National Scenic Areas"* (NPF4, Policy 11, Page 53).

1.11 NPF4 requires that local development plans *"should seek to realise their area's full potential for electricity and heat from renewable, low carbon and zero emission sources by identifying a range of opportunities for energy development"*.

1.12 There are no National Parks or National Scenic Areas within the Council's area, and therefore aspects referring to nationally designated landscapes within NPF4 Policy 4c (Natural Places) and Policy 11b (Energy) will not apply.

1.13 In relation to locally designated landscapes (Local Landscape Areas), NPF4 Policy 4d (Natural Places) states that:

- *"LDPs will identify and protect locally, regionally, nationally and internationally important natural assets, on land and along coasts. The spatial strategy should safeguard them and take into account the objectives and level of their protected status in allocating land for development..."*

1.14 Policy 4d also requires any *"significant adverse effects on the integrity of the area or the qualities for which it has been identified"* to be outweighed *"by social, environmental or economic benefits of at least local importance"*.

1.15 NPF4 Policy 11e requires project design and mitigation to address the impacts of renewable energy on landscape and visual impacts, whilst recognising that some impacts *"are to be expected"* for certain forms of renewable energy development.

1.16 The Scottish Government's Local Development Planning Guidance (2023) advises that planning authorities may wish to prepare landscape sensitivity studies to inform their spatial strategy with regard to renewable energy developments.

1.17 In addition to the sensitivity of local landscape character to relevant forms of renewable energy, the potential effect of renewables upon designated areas including green belt, countryside policy areas and local landscape areas will be considered.

1.18 NPF4 Policy 8a (Green Belts) permits renewable energy development where it can be demonstrated that:

- *"reasons are provided as to why a green belt location is essential and why it cannot be located on an alternative site outwith the green belt;*
- *the purpose of the green belt at that location is not undermined;*

- *the proposal is compatible with the surrounding established countryside and landscape character;*
- *the proposal has been designed to ensure it is of an appropriate scale, massing and external appearance, and uses materials that minimise visual impact on the green belt as far as possible; and*
- *there will be no significant long-term impacts on the environmental quality of the green belt."*

1.19 One of the stated outcomes of this policy is that *"land is managed to help tackle climate change"*, which renewable energy development would help to facilitate. This is of relevance to both the siting of renewables within the Edinburgh Green Belt and connectivity to the transmission network, with many high voltage overhead lines and substations located in green belt or countryside locations.

Local Development Plan

1.20 The current local development plan, the City of Edinburgh Council's 2024 City Plan 2030, supports low and zero carbon energy generation but acknowledges that meeting national targets for reduced emissions and renewable energy from wind farms will be challenging, as these *"are not appropriate for location in Edinburgh's urban area or surrounding countryside, much of which is green belt and/or in proximity to Edinburgh Airport"*.

1.21 This assessment will play a part in identifying future opportunities for renewable energy development, alongside related technical, environmental and social matters. It will be used to inform the next LDP (City Plan 2040).

1.22 It also provides a contextual picture of landscape sensitivity to inform consideration of renewable energy proposals, alongside the Edinburgh Landscape Character Assessment to inform siting, design and appropriate mitigation of proposals.

Chapter 2
Methodology

2.1 The study was undertaken in accordance with NatureScot's 2022 Landscape Sensitivity Assessment Guidance (Methodology). This methodology highlights the specific landscape and visual characteristics that are most likely to be affected by renewable energy development (wind energy, solar PV and BESS).

2.2 For the landscape sensitivity assessment of wind energy, solar PV and BESS, an overall judgement on landscape sensitivity is presented on a five-point scale from 'high' to 'low' (see Table 3.1 and Table 3.2).

Scope of the assessments

2.3 The landscape sensitivity assessment (LSA) focuses on the landscape considerations associated with wind energy, solar PV and BESS developments at a strategic level. Single turbines or domestic scale installations are not considered in this assessment.

2.4 The LSA provides an indication of landscape sensitivity across the City of Edinburgh Council area. However, consideration was given to wind farms, solar PV and BESS energy development in neighbouring local authorities, when considering patterns of renewable energy development.

Spatial framework for the assessment

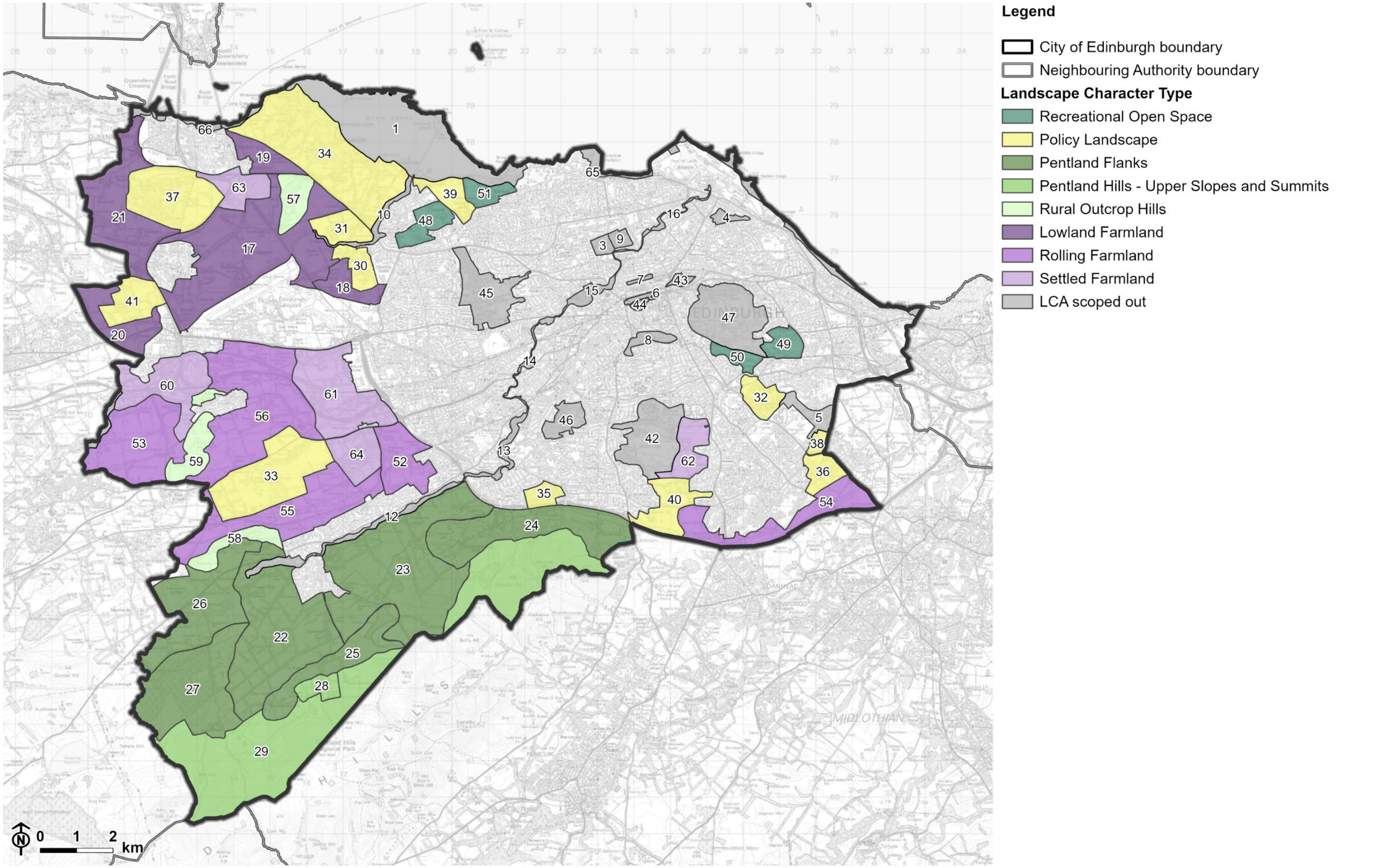
2.5 The assessment uses the spatial framework of Landscape Character Types (LCTs) identified in the City of Edinburgh Council Landscape Character Assessment (2026), as shown on Figure 2.1. Landscape Character Types (LCTs) form the basis for the assessment of wind, solar PV and BESS development, however variations within the LCTs and Landscape Character Areas (LCAs) that are exceptions to this overall assessment are noted.

2.6 Given the urban and settled nature of much of the City of Edinburgh Council area, and the very high sensitivity of open space areas within the city, a number of LCTs were scoped out of detailed assessment. LCTs located along the coastline, between the urban edge and the Firth of Forth, were also scoped out of detailed assessment given the limited space available to site commercial-scale renewable energy developments within these areas.

2.7 LCTs that have not been carried forward for detailed assessment are set out below:

- Coastal Sands LCT: Limited area available to site commercial-scale wind, solar and BESS developments. Not considered further.
- Urban Waterfront LCT: Limited area available to site commercial-scale wind, solar and BESS developments. Not considered further.
- Urban Greenspace LCT: Considered very high sensitivity due to proximity to settled urban area, presence of numerous landscape and historic environment designations and high recreational value. Not considered further.
- Incised River Valley LCT: Limited area available to site commercial-scale wind, solar and BESS developments, and considered very high sensitivity due to proximity to settled urban area, presence of numerous landscape and historic environment designations and high recreational value. Not considered further.
- Prominent Urban Hills LCT: Considered very high sensitivity due to proximity to settled urban area, presence of numerous landscape and historic environment designations and high recreational value. Not considered further.

Figure 2.1: Landscape Character Types



Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

2.8 This study is focused on landscape sensitivity to renewable energy development. However, other important spatial and environmental considerations for wind, solar PV and BESS development include:

- Protected habitats and species, including bats and birds. Bird species which are qualifying interests for the Special Protection Areas in the Firth of Forth may forage up to 20km from the SPA. NatureScot's 2025 Wind farm impacts on birds provides further guidance.
- Solar arrays should be sited and designed to avoid glint and glare on the runway approach to and within 6km of Edinburgh Airport. Aerodrome safeguarding also applies to wind farms up 55km from the airport due to height and radar conflicts.
- The Pentland Hills are part of the controlled airspace around the aerodrome. Additionally, the MoD conducts glider flights from RAF Kirknewton to the east of the Council's boundary with West Lothian.

2.9 It is anticipated that The Scottish Government will publish guidance for local authorities on BESS, which will set out other relevant spatial and environmental considerations.

Characteristics of wind, solar PV and BESS development types and their potential landscape impacts

Wind energy development

2.10 All turbines considered in this study are large-scale vertical structures that may be highly visible within the landscape. Wind energy developments may affect the landscape in the following ways:

- Construction of turbines and related infrastructure may result in changes to natural topography and the direct loss of landscape features e.g. trees and hedgerows.
- The presence of turbines (and turbine lighting, where required) may increase the perceived human influence on the landscape, and this can particularly affect landscape with a strong sense of naturalness or tranquillity, or which form a setting to heritage assets or exhibit a strong sense of time depth.
- The movement of the turbine blades is a unique feature of wind energy development, setting them apart from other stationary tall structures in the

landscape, and may affect characteristics of stillness, remoteness and tranquillity.

- Turbines may be perceived as out of scale in relation to human scale features in the landscape e.g. farmsteads, quiet roads, walls and hedgerows.
- The tall vertical scale of turbines may alter the apparent scale of landforms.
- Turbines on skylines may compete with existing skyline features (e.g. distinctive cairns), where undeveloped skylines or landmark features are characteristic of the landscape.
- Access tracks or upgrades on access routes may require alterations to topography and be highly visible, particularly in an open or undeveloped landscape.

2.11 The LSA considers the suitability of different scales of wind turbines, using bands reflecting the typical scale of development that is most likely to be put forward by developers. In addition to turbine tip height, the 'size' of a wind energy development can be defined by the number of turbines. In terms of turbine numbers, the study considers a range of development scales, though this is dealt with in a less formal way than for turbine height, since height is the key factor in determining the compatibility of a proposal with its landscape. Smaller groups of turbines (approximately two to three turbines) and medium or larger groups (four or more turbines) are mentioned in the assessment where it is judged that the sensitivity of the landscape would differ between these sizes of development. Single turbines are not considered in this assessment. Table 2.1 sets out approximate indicative wind energy development scenarios considered in the sensitivity assessment, based on the turbine tip height.

Table 2.1: Wind energy development sizes/scales

Wind Energy Scale Bandings	Wind Turbine Size
Small to medium	Typically, 50m to 149.9m blade tip height
Large	Typically, over 150m blade tip height

Figure 2.2: Domestic-scale (48m blade tip height) wind turbines near Cousland in Midlothian

Solar PV developments

2.12 Solar PV developments consist of racks of south-facing panels and associated structures such as inverters or transformer substations, secure fencing, CCTV, screening planting and access tracks. These developments can occupy substantial areas of ground which may be visible, particularly if located on slopes. Landscape and visual effects may include the following:

- Solar PV developments may be particularly visible in an open landscape, on upper slopes of hillsides or where overlooked.
- The reflective nature and materiality of PV panels may contrast with the colour and texture of the surrounding undeveloped landscape.
- The presence of solar PV panels and associated infrastructure may increase the perceived human influence on the landscape and erode intrinsically undeveloped character.
- Solar PV development will change the land use and appearance of a field or fields, affecting land cover patterns.

- The regular edges and linear arrangement of solar PV developments may be conspicuous in more irregular landscape (particularly where field boundaries are irregular).
- The height of racks (up to around 4 metres) is likely to exceed the scale of typical hedgerow field boundaries.
- Screen planting (often in the form of tall hedgerows) around solar PV developments may change the sense of enclosure of a landscape and restrict or alter important views.
- Construction of solar PV development may result in damage to landscape features such as hedgerow or traditional stone field boundaries or alteration of the underlying field pattern or scale.
- Structures may appear out of place in particularly wilder or undeveloped areas of landscape which are valued for their qualities of remoteness and tranquillity.

2.13 The LSA considers the suitability of different scales of solar PV development, using bandings reflecting those that are most likely to be put forward by developers. These typical development scenarios are set out in Table 2.2 below. Approximate size dimensions account for the total area of development, including associated ancillary infrastructure. For comparison and with reference to locally-identifiable features within Edinburgh, one hectare is roughly equivalent to the size of St. Andrew Square Garden in the city centre.

Table 2.2: Solar development sizes/scales

Solar PV Scale Bandings	Solar PV Size
Small	Less than 5 hectares footprint, around 4 metres height maximum
Medium to large	5 to 20 hectares footprint, around 4 metres height maximum

Figure 2.3: Easter Bush Solar Farm at the University of Edinburgh Midlothian Campus

Battery energy storage systems (BESS)

2.14 This study also considers the potential for BESS installations. BESS generally comprise metal battery storage containers (number depending on the capacity of the installation, typically 3m high) and may also include associated substations. Landscape and visual effects would be similar to effects relating to solar PV developments, as set out in paragraph 2.12, although the following additional considerations apply:

- Battery storage containers are less visually permeable than solar PV arrays and typically form a series of solid rectangular buildings in the landscape. Where screening is insufficient, this can introduce an industrial character to the rural landscape.
- BESS installations are likely to require landform modifications to create hardstanding platforms to site the battery storage units, which may alter the pattern of the natural topography and be visible from elevated vantage points.
- Access requirements may be more substantial in order to transport the storage containers to site and provide ongoing maintenance.

- Unlike solar arrays, paint finishes can be selected which are less reflective or use muted colours to help the structures recede in the landscape. However, standard units may not have an appropriate site specific colour.
- Cooling fans may require acoustic bunding or noise barriers and this may be audible from recreational routes or near settlement.
- Due to their function to store surplus energy from the network or renewable sources, BESS tend to be located close to a substation or associated with a wind farm or solar PV array, where they can be used to manage troughs in renewable power generation. This also may contribute to cumulative landscape and visual effects.

2.15 The LSA considers the suitability of different scales of BESS development, using bandings reflecting those that are most likely to be put forward by developers. These typical development scenarios are set out in Table 2.3 below. Approximate size dimensions account for the total area of development, including associated ancillary infrastructure.

Table 2.3: BESS development sizes/scales

BESS Scale Bandings	BESS Size
Small BESS installation	Less than 1 hectare footprint, around 3m height maximum
Medium to large BESS installation	1 to 15 hectares footprint, around 3m height maximum

Figure 2.4: BESS development example (not within the Council area)

Cumulative effects

2.16 As larger numbers of renewable energy developments are built, it is increasingly necessary to consider their cumulative effects. The cumulative effects of multiple schemes are a significant issue for planning authorities, particularly for wind farm developments.

2.17 The most significant cumulative effects are those that result in changes in the character of a landscape to such an extent as to transform it into a different landscape type. It should be recognised that if numerous developments are built, then at some point further development could tip the balance through its additional effects.

2.18 Key cumulative considerations include:

- How different developments relate to each other and the underlying landscape;
- Similarities or differences in design rationale, such as turbine scale and spacing, or relationship of solar arrays to field patterns;
- Their frequency as one moves through the landscape, or the sequential visual effects resulting from multiple developments;

- How landscape mitigation associated with multiple developments influences the landscape pattern or character of views;
- How different developments relate to the composition of views e.g. consideration of impacts on developed versus undeveloped parts of the view; and
- Their visual separation, or the potential for combined or successive visual effects in views.

2.19 The LSA does not include assessment of the potential cumulative impacts of specific multiple developments, as different combinations of development are not known at this stage. Specific cumulative effects are most appropriately considered at the individual site level, including through the process of Landscape and Visual Impact Assessment (LVIA).

Evaluating landscape sensitivity

2.20 The landscape sensitivity assessment is informed by NatureScot's Landscape Sensitivity Assessment Guidance (2022).

2.21 The study defines landscape sensitivity as follows:

> *"Landscape sensitivity is a measure of the ability of a landscape to accommodate change arising from specified development types or land management. It combines judgements of the susceptibility of the landscape to change and the values attached to the landscape."*

Assessment criteria

2.22 Landscape sensitivity assessment requires consideration of both landscape susceptibility (how vulnerable the landscape is to change from the type of development being assessed) and landscape value (the relative value attached to different landscape types by society). In this study, susceptibility and value are not considered separately, but both are addressed through the criteria that were developed.

2.23 The selection of landscape sensitivity indicators ('criteria') for this study is informed by the attributes of the landscape that could be affected by wind, solar and BESS development. These consider the 'landscape', 'visual' and 'perceptual' aspects

of sensitivity. Their selection is also based on current best practice and experience of LUC in undertaking similar studies elsewhere in the UK.

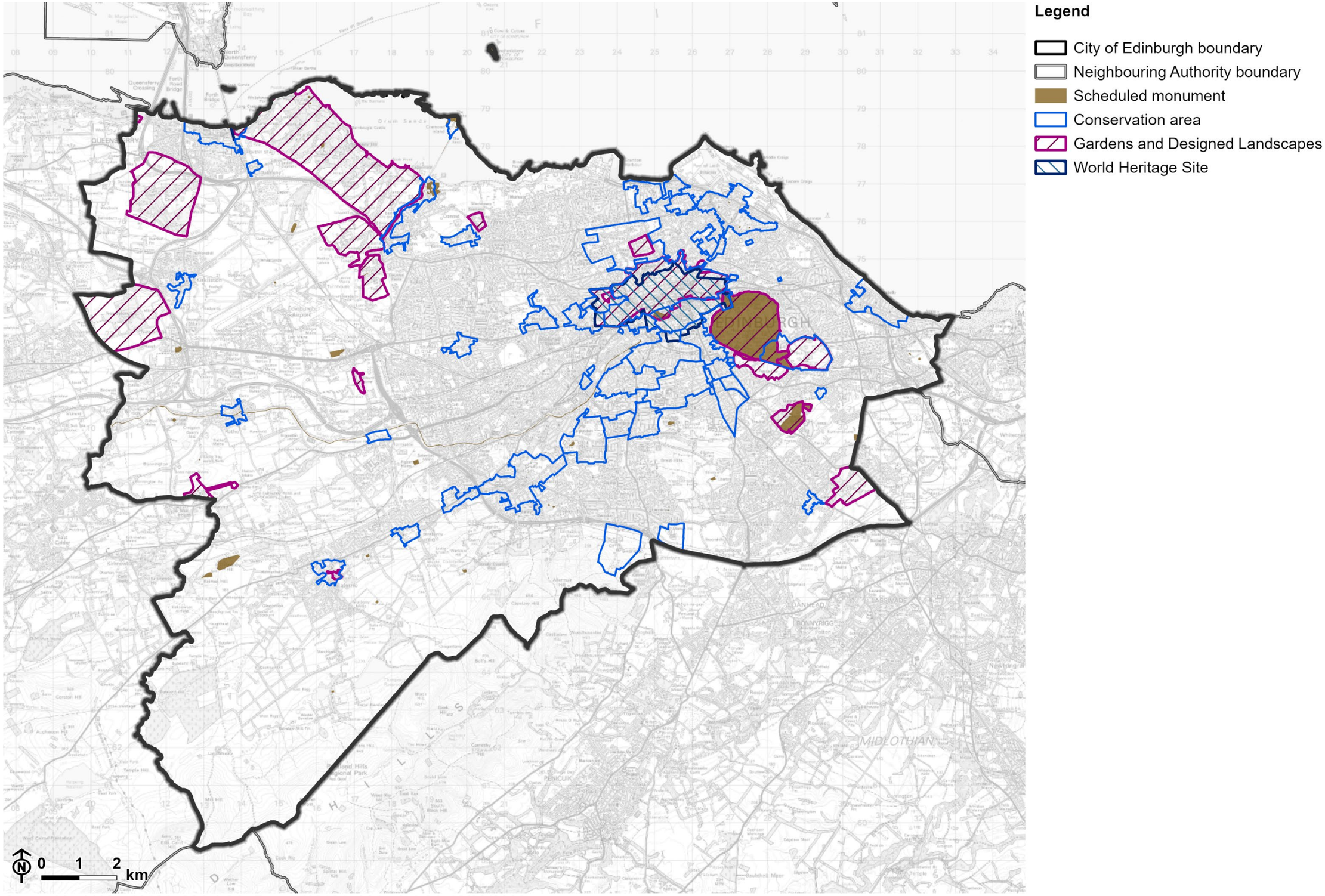
2.24 The following five criteria headings are used for this study:

- Landform and scale;
- Land cover and scale (including field and settlement patterns);
- Historic landscape character;
- Visual receptors;
- Visual character (including skylines and intervisibility); and
- Perceptual and scenic qualities.

2.25 Each criterion evaluates elements of both susceptibility and value. Some criteria are more closely linked with value, such as 'perceptual and scenic qualities', which incorporates consideration of scenic value as represented by LLA designation. However, other aspects of value are covered elsewhere. For example, recreational value is considered in relation to 'visual receptors'. All the criteria give some consideration to how valued the relevant characteristics of landscape are, in reaching a judgement.

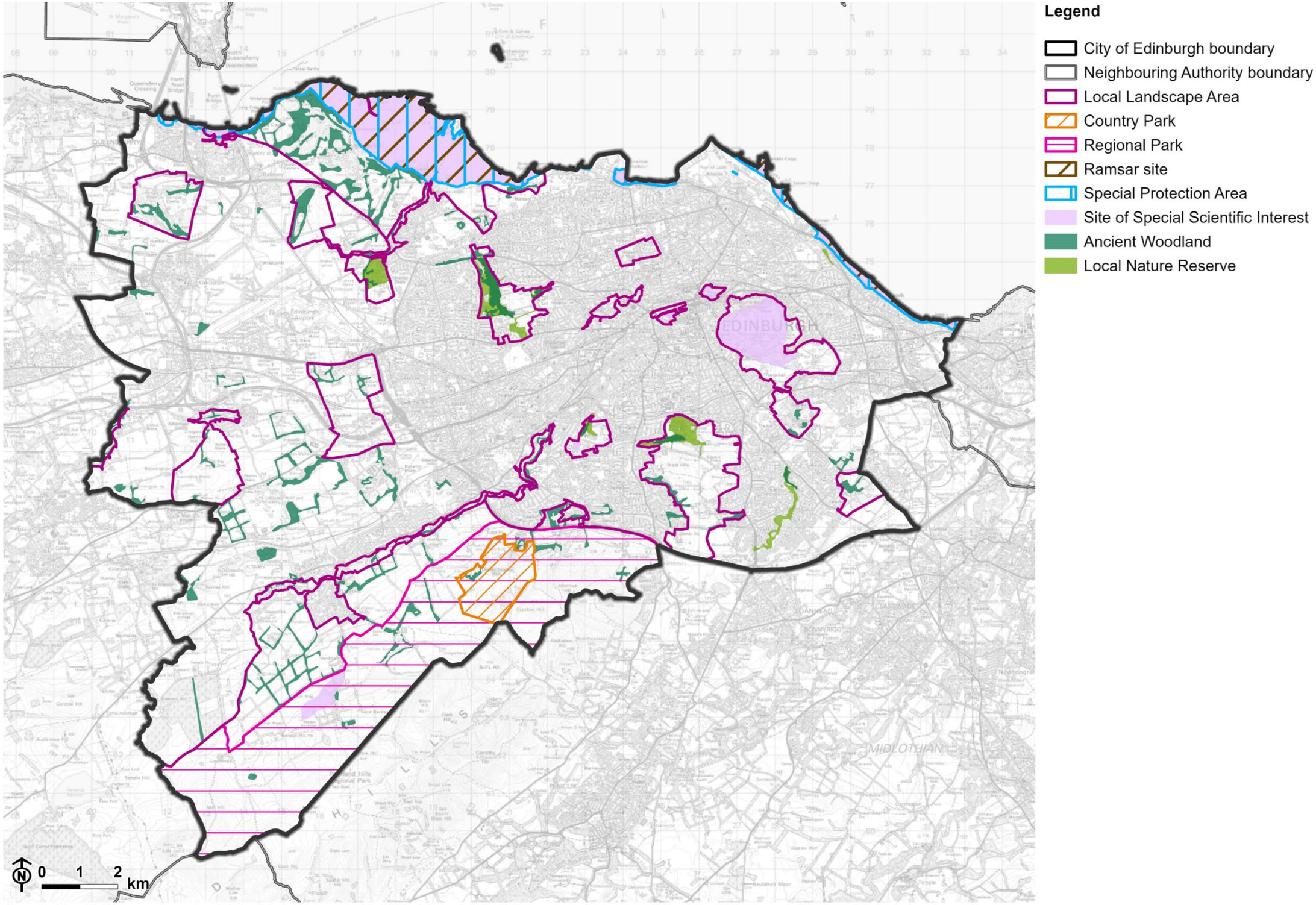
2.26 The following text provides guidance and examples of higher and lower sensitivity features/attributes for applying the criteria in Edinburgh, for wind energy, solar PV and BESS, respectively. The assessments present a commentary against each criterion to inform the judgements on levels of sensitivity. It is important to note that the relative importance of each criterion varies between landscape types due to the inherent differences in landscape character. The initial stage of the assessment involved a thorough desk-based study drawing on sources of spatial and descriptive information regarding the landscape. Figure 2.5 shows Historic Environment designations and Figure 2.6 shows Natural Heritage and Landscape Designations that informed the desk-based study. This was supplemented by field survey work to publicly accessible locations undertaken by a team of landscape professionals to verify the findings.

Figure 2.5: Historic Environment Designations



Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

Figure 2.6: Landscape and Natural Heritage Designations



Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 26/02/2026

Wind energy developments assessment criteria and guidance

Landform and scale

2.27 A flat or gently sloping landform is likely to be less sensitive to wind energy development than a landscape with a dramatic or rugged landform, distinct landform features (including prominent hills and valleys or glens) or pronounced undulations. Larger scale landforms are likely to be less sensitive than smaller scale landforms – because turbines may appear out of scale, detract from visually important landforms or appear visually confusing (due to turbines being at varying heights) in the latter types of landscape.

- Low sensitivity: An extensive lowland flat landscape or plateau; often a larger scale landform.
- Low-medium sensitivity: A simple gently rolling landscape; likely to be a medium-large scale landform.
- Medium sensitivity: An undulating landscape, perhaps also incised by valleys or glens, likely to be a medium scale landform.
- Medium-high sensitivity: A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform.
- High sensitivity: A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform.

Land cover pattern and scale (including field and settlement pattern)

2.28 A simple, regular landscape with extensive areas of consistent land cover is likely to be less sensitive to wind energy development than a landscape with more complex or irregular land cover patterns, which may reflect the presence of semi-natural habitats, or areas with smaller and/or irregular field sizes.

2.29 Landscape with frequent human scale features, such as settlements, farmsteads, small farm woodlands, trees and hedges may be particularly sensitive to larger turbines. This is because large features such as wind turbines may dominate smaller scale features within the landscape.

- Low sensitivity: An open, continuous landscape with uniform land cover, or an urban or ‘brownfield’ landscape. Few/no human-scale features.
- Low-medium sensitivity: A landscape of large open fields of modern enclosure, with little variety in land cover. A landscape which contains areas of brownfield sites or urban influences. Occasional human-scale features such as trees and domestic buildings.
- Medium sensitivity: A landscape with medium sized fields (or a mix of modern and traditional enclosure) and some variations in land cover. A semi-developed landscape which may contain some brownfield sites or urban influences.
- Medium-high sensitivity: A landscape with irregular or small-scale fields and a variety in land cover. An undeveloped landscape, perhaps with some areas of semi-natural land cover. A traditional landscape that is lightly settled and/or retains a historic settlement pattern, with frequent human scale features.
- High sensitivity: A landscape dominated by traditional field patterns and / or semi-natural land cover. The field pattern may be characterised by smaller-scale, traditional fields, and a mosaic of heath, moor or wetland. An undeveloped or traditional landscape with a sparse settlement pattern and/or has retained a strong historic settlement pattern. A landscape with a dense distribution of human-scale features, such as woodland.

Historic landscape character

2.30 A landscape which contains important archaeological or historic features or historic associations is likely to have a higher level of sensitivity to wind energy development. Historical features may be in the form of historic land cover types and field systems, an historic designed landscape such as a Garden and Designed Landscape (GDL), or buildings/structures designated for their historical significance.

2.31 Areas which make a significant contribution to the setting of a historic feature or a designed landscape may also have higher sensitivity to wind energy development. A landscape that is primarily of modern influence and origin will have a lower sensitivity to wind energy development.

- Low sensitivity: A landscape with relatively few historic features important to the character of the area and little time depth (i.e. large intensively farmed fields).
- Low-medium sensitivity: A landscape with a small number of historic features important to the character area and some time-depth.
- Medium sensitivity: A landscape with some visible historic features of importance to character, and a variety of time depth.

- Medium-high sensitivity: A landscape with many historic features important to the area and a strong sense of time depth.
- High sensitivity: A landscape with a high density of historic features important to the character of the area and extensive time depth (i.e. piecemeal enclosure with irregular boundaries, ridge and furrow).

Visual receptors

2.32 This criterion considers the number and distribution of sensitive visual receptors, such as residents in their communities and people accessing the landscape for recreational purposes. This may be indicated by the presence of features and facilities which enable enjoyment of the landscape, and the importance of these. This is indicated by the presence of long-distance walking or cycle routes, Core Paths or other local paths, Regional Parks, Country Parks and outdoor tourist/visitor attractions with facilities where enjoyment of the landscape is important to the experience. Greater weight is afforded to recreational opportunities that are readily and easily accessible by members of the public.

- Low sensitivity: An unpopulated landscape with few opportunities to engage in recreational activities where appreciation of the landscape is integral to the experience.
- Low-medium sensitivity: A sparsely populated landscape with limited opportunities to engage in recreational activities where appreciation of the landscape is integral to the experience.
- Medium sensitivity: A landscape with some recreational value/some opportunities to experience the landscape and some areas of settlement.
- Medium-high sensitivity: A landscape with high recreational value locally/frequent opportunities to experience the landscape and densely populated with many sensitive receptors.
- High sensitivity: A landscape with very high recreational value regionally/frequent opportunities to experience the landscape and densely populated with many sensitive receptors that experience a strong visual relationship to the landscape.

Visual character (including skylines and intervisibility)

2.33 The relative visibility of a landscape may influence its sensitivity to wind development. An elevated landscape such as a hill range or plateau, which is viewed

from another landscape, may be more sensitive than a landscape with limited visibility. This criterion considers the influence of both landform and land cover on the openness or enclosure of views, and also builds on the consideration of the number and distribution of visual receptors covered in the criteria above.

2.34 Landscape which has an important visual relationship with other areas, for example where one area provides a backdrop to a neighbouring area, are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether adjacent areas of landscape provide a setting for one another.

2.35 This criterion also considers the role of the landscape, for example in forming the setting of a settlement, reinforcing settlement identity, or providing a gateway function, as perceived by residents in their communities who are considered sensitive to changes in the view resulting from renewable energy development.

2.36 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to wind energy development because turbines may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines. Important landmark features on the skyline might include historic features or monuments as well as landforms. Where skylines are affected by development, e.g. through the presence of electricity pylons or existing turbines, the addition of turbines of a different scale may lead to visual confusion. Therefore, the presence of existing development cannot always assume a lower sensitivity to new development.

- Low sensitivity: An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
- Low-medium sensitivity: A landscape with limited connections to neighbouring areas, and/or where adjacent areas of landscape are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features – other skylines in adjacent LCTs may be more prominent.
- Medium sensitivity: A landscape which has some inter-visibility with neighbouring areas. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
- Medium-high sensitivity: A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A landscape with

prominent skylines or slopes that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.

- High sensitivity: A landscape which has important visual relationships with one or more neighbouring areas. A landscape with prominent or distinctive undeveloped skylines, very exposed and visible slopes, or with important landmark features on skylines.

Perceptual and scenic qualities

2.37 A landscape that is relatively remote or tranquil (and with dark skies) tends to be more sensitive to wind energy, since turbines may be perceived as intrusive. A landscape which is relatively free from overt human activity and disturbance, and which has a perceived naturalness or a strong traditional feel, will therefore be more sensitive. Wind energy development will generally be less intrusive in a landscape which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.38 A landscape that has a high scenic quality will be more sensitive to wind energy development. Scenic qualities can include contrasts and combinations of landform and landcover, for example the contrast between open moorland hills and intimate wooded cleughs which is experienced in Edinburgh. Scenic qualities are recorded in the Statement of Importance for Local Landscape Areas and noted from fieldwork.

- Low sensitivity: A landscape with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land. A landscape with much human activity and modern development, such as industrial areas.
- Low-medium sensitivity: A landscape with few pleasing combinations of features, visual contrasts and/or dramatic elements. A semi-developed landscape with much human activity and dispersed modern influences, such as settlement fringes.
- Medium sensitivity: A landscape with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. A semi-developed landscape with some modern influences and human activity, such as arable farmland.
- Medium-high sensitivity: A landscape with some pleasing combinations of features, visual contrasts and/or dramatic elements. A more naturalistic landscape and/or one with little modern human influence and development.

- High sensitivity: A landscape with consistently pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Solar PV and BESS assessment criteria and guidance

Landform and scale

2.39 A flat or gently undulating lowland landscape or extensive plateau is likely to be less sensitive to solar/BESS development than a landscape with prominent landform, including hills and rugged outcrops. This is because arrays of solar panels/BESS units will be less easily perceived in a flat landscape than on a slope (including hills and rugged outcrops) especially higher slopes.

- Low sensitivity: An extensive lowland flat landscape or plateau, often a larger scale landform.
- Low-medium sensitivity: A simple gently rolling landscape, likely to be a medium-large scale landform.
- Medium sensitivity: An undulating landscape, perhaps also incised by glens, likely to be a medium scale landform.
- Medium-high sensitivity: A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform.
- High sensitivity: A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small-scale or intimate landform.

Land cover pattern and scale (including field and settlement pattern)

2.40 Since solar PV panels/BESS developments introduce a new land cover (of built structures), a landscape containing existing hard surfacing or built elements (e.g. urban areas or brownfield sites) is likely to be less sensitive to solar PV development than highly undeveloped or naturalistic landscape.

2.41 Landscape with small-scale, more irregular field patterns is likely to be more sensitive to the introduction of solar PV development than landscape with large,

regular scale field patterns because of the risk of diluting or masking the characteristic landscape patterns. This would be particularly apparent if development takes place across a number of adjacent fields where the field pattern is small and intricate (bearing in mind that the height of panels or BESS units could exceed that of a hedge or stone wall). Landscape with frequent human scale features, such as settlements, farmsteads, small farm woodlands, trees and hedges may be particularly sensitive to BESS development which may dominate smaller scale features within the landscape.

2.42 Landscape with a distinctive or historic settlement pattern would be particularly sensitive to the introduction of solar PV/BESS.

- Low sensitivity: A landscape with large-scale, regular fields of mainly modern origin. An urban or 'brownfield' landscape. Few/no human-scale features.
- Low-medium sensitivity: A landscape which is mainly defined by large, modern fields or those sub-divided for non-traditional uses. An area of some urban or brownfield influences. Occasional human-scale features such as trees and domestic buildings.
- Medium sensitivity: A landscape with a mixture of large-scale, modern fields and some smaller, more traditional enclosure. An undeveloped landscape, perhaps with some brownfield sites or urban influences.
- Medium-high sensitivity: A landscape with irregular or small-scale field patterns, with a few isolated areas of modern enclosure. An undeveloped landscape with some areas of semi-natural land cover. An undeveloped landscape that is lightly settled and/or retains a historic settlement pattern, with frequent human scale features.
- High sensitivity: A landscape dominated by small-scale, traditional field patterns and/or by semi-natural land cover. An undeveloped landscape with a sparse settlement pattern and/or has retained a strong historic settlement pattern. A landscape with a dense distribution of human-scale features, such as woodland.

Historic landscape character

2.43 Landscape which contains important archaeological or historic features or historic associations is likely to have a higher level of sensitivity to solar PV/BESS development. Historical features may be in the form of historic land cover types and field systems, historic designed landscapes such as a GDL, or buildings/structures designated for their historical significance.

2.44 Areas which make a significant contribution to the setting of a historical feature or designed landscape may also have higher sensitivity to solar PV/BESS development. Landscape that is primarily of modern influence and origin will have a lower sensitivity to solar PV/BESS development.

- Low sensitivity: A landscape with relatively few historic features important to the character of the area and little time depth (i.e. large intensively farmed fields).
- Low-medium sensitivity: A landscape with a small number of historic features important to the character area and some time-depth.
- Medium sensitivity: A landscape with some visible historic features of importance to character, and a variety of time depths.
- Medium-high sensitivity: A landscape with many historic features important to the area and a strong sense of time depth.
- High sensitivity: A landscape with a high density of historic features important to the character of the area and extensive time depth.

Visual receptors

2.45 This criterion considers the number and distribution of sensitive visual receptors, such as residents in their communities and people accessing the landscape for recreational purposes. This may be indicated by the presence of features and facilities which enable enjoyment of the landscape, and the importance of these. This is indicated by the presence of long-distance walking or cycle routes, Core Paths or other local paths, Regional Parks, Country Parks and outdoor tourist/visitor attractions with facilities where enjoyment of the landscape is important to the experience. Greater weight is afforded to recreational opportunities that are readily and easily accessible by members of the public.

- Low sensitivity: An unpopulated landscape with few opportunities to engage in recreational activities where appreciation of the landscape is integral to the experience.
- Low-medium sensitivity: A sparsely populated landscape with limited opportunities to engage in recreational activities where appreciation of the landscape is integral to the experience.
- Medium sensitivity: A landscape with some recreational value/some opportunities to experience the landscape and some areas of settlement.

- Medium-high sensitivity: A landscape with high recreational value locally/frequent opportunities to experience the landscape and densely populated with many sensitive receptors.
- High sensitivity: A landscape with very high recreational value regionally/frequent opportunities to experience the landscape and densely populated with many sensitive receptors that experience a strong visual relationship to the landscape.

Visual character (including skylines and intervisibility)

2.46 The relative visibility of a landscape may influence its sensitivity to solar PV/BESS development. An elevated landscape such as a hill range or plateau, which is viewed from other areas of landscape, may be more sensitive than an enclosed landscape, since any solar panels/BESS units will be more widely seen. This criterion considers the influence of both landform and land cover on the openness or enclosure of views, and also builds on the consideration of number and distribution of visual receptors covered in the criteria above.

2.47 Landscape which has important visual relationships with other areas, for example where one area provides a backdrop to a neighbouring area, are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether areas of adjacent landscape provide a setting for one another.

2.48 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to solar PV/BESS development because panels or BESS units may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines if not sited appropriately. Important landmark features on the skyline might include historic features or monuments as well as landform. Where skylines are affected by development, e.g. through the presence of electricity pylons, the addition of solar panels/BESS units may lead to visual confusion due to differences in scale. Therefore, developed skylines might not necessarily indicate lower sensitivity.

2.49 This criterion also considers the role of the landscape, for example in forming the setting of a settlement, reinforcing settlement identity, or providing a gateway function, as perceived by residents in their communities who are considered sensitive to changes in the view resulting from renewable energy development.

- Low sensitivity: An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
- Low-medium sensitivity: A landscape with limited connections to neighbouring areas, and/or where adjacent areas of landscape are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features – other skylines in adjacent LCTs may be more prominent.
- Medium sensitivity: A landscape which has some inter-visibility with neighbouring areas. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
- Medium-high sensitivity: A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A landscape with prominent skylines or slopes that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.
- High sensitivity: A landscape which has important visual relationships with one or more neighbouring areas. A landscape with prominent or distinctive undeveloped skylines, very exposed and visible slopes, or with important landmark features on skylines.

Perceptual and scenic qualities

2.50 Landscape that is relatively remote or tranquil tends to be more sensitive to solar PV/BESS development, since solar panels/BESS units may be perceived as intrusive. Landscape which is relatively free from overt human activity and disturbance, and which has a perceived naturalness or a strong traditional feel, will therefore be more sensitive. Qualities such as tranquillity can be found even in settled areas, where the influence of overtly modern development is reduced. Solar PV/BESS development will generally be less intrusive in landscape which is strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.51 Landscape that has a high scenic quality will be more sensitive. Scenic qualities can include contrasts and combinations of landform and landcover, for example the contrast between open moorland hills and intimate wooded cleughs which is experienced in Edinburgh. Scenic qualities are recorded in the Statement of Importance for Local Landscape Areas and noted from fieldwork.

- Low sensitivity: A landscape with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land.
- Low-medium sensitivity: A landscape with much human activity and modern development, such as industrial areas. A landscape with few pleasing combinations of features, visual contrasts and/or dramatic elements.
- Medium sensitivity: A developed or less developed landscape with much human activity and dispersed modern development, such as settlement fringes. A landscape with occasional pleasing combinations of features, visual contrasts and/or dramatic elements.
- Medium-high sensitivity: A relatively undeveloped landscape, with some modern development and human activity, such as arable farmland. A landscape with some pleasing combinations of features, visual contrasts and/or dramatic elements.
- High sensitivity: A more naturalistic landscape and/or one with little modern human influence and development. A landscape with consistently pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Making overall judgements on landscape sensitivity

2.52 As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of landscape sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria').

2.53 There may be one criterion that has a strong influence on landscape sensitivity in a particular LCT which increases the overall landscape sensitivity score. For example, for solar PV this might be a landscape with a prominent/highly visible ridgeline. There may also be criteria that produce conflicting scores. For example, a small-scale landscape with intact field patterns valued for its perceptual qualities and historic character may also afford greater screening of panels from topography and a dense network of walls or hedgerows. A conflicting example for wind energy development could be in the context of a settled landscape. While the landscape would have greater human influence (indicating a lower sensitivity to new development), it would also contain more human-scale features that could be affected by large-scale wind turbines and a higher number or widespread distribution

of sensitive residential or recreational receptors (indicating a higher sensitivity). Conversely, a more remote landscape is likely to lack human-scale features but is likely to present a higher sensitivity from a perceptual and scenic point of view. In these situations, a professional judgement is made on overall landscape sensitivity, taking all criteria into account in the context of their importance to the landscape character and quality of the individual area.

2.54 Landscape sensitivity is expressed on five-level scale from low sensitivity to high sensitivity, as set out below. A landscape of higher sensitivity is likely to experience a greater impact on landscape character as a result of a given development type/scale, and a landscape of lower sensitivity is likely to experience a lesser impact on landscape character.

- Low sensitivity: Key characteristics and qualities of the landscape are robust in that they can withstand change from the introduction of wind turbines, solar panels and BESS developments. The landscape is likely to be able to accommodate wind, solar PV and BESS development without a significant change in character. Care is still needed when siting and designing these developments to ensure best fit with the landscape.
- Low-medium sensitivity: Fewer of the key characteristics and qualities of the landscape are vulnerable to change. The landscape is likely to be able to accommodate wind, solar PV and BESS development with limited change in character. Care is still needed when siting and designing to avoid adversely affecting key characteristics.
- Medium sensitivity: Some of the key characteristics and qualities of the landscape are vulnerable to change. Although the landscape may have some ability to absorb wind, solar PV and BESS development, it is likely to cause a degree of change in character. Care would be needed in siting and design.
- Medium-high sensitivity: Key characteristics and qualities of the landscape are vulnerable to change from wind, solar PV and BESS development. There may be limited opportunity to accommodate wind turbines/solar panels without significantly changing landscape character. Great care would be needed in siting and design.
- High sensitivity: Key characteristics and qualities of the landscape are highly vulnerable to change from wind, solar PV and BESS development. Such development is likely to result in a significant change in character, with very limited or no opportunity to accommodate development.

Presentation of results

2.55 The full landscape sensitivity assessments for each of the LCTs are presented in separate assessment profiles. These are structured as follows:

- A map of the LCT and representative photographs;
- A summary of the key characteristics of the LCT and relevant special qualities of local landscape designations, if applicable;
- A description of the renewable energy development baseline;
- An evaluation of the LCT and a sensitivity rating for wind energy and solar PV/BESS development against each of the assessment criteria;
- A summary of the landscape sensitivity of the LCT to wind energy and solar PV/BESS developments, referencing particular features, attributes or locations which may be more or less sensitive;
- Discussion of any variations to the overall LCT scores within the LCT; and
- Overall landscape sensitivity scores for wind energy and solar PV/BESS development (based on the scale bandings identified in Chapter 2) for each LCT using the five-level scale from low to high sensitivity.

Summary and guidance

2.56 A comparative summary of overall landscape sensitivity within the local authority area including sensitivity maps for wind energy, solar PV and BESS development is provided in Chapter 3, along with high level siting and design guidance.

Chapter 3
Landscape Sensitivity Assessment Results and Guidance

3.1 This Landscape Sensitivity Assessment is a strategic appraisal, which provides landscape evidence to inform the spatial strategy alongside other matters.

3.2 As part of any proposal for renewable energy development, site specific landscape and visual impact assessment would be expected.

3.3 The LCTs within Edinburgh contain areas of higher and lower sensitivity that vary from the overall scores. It is therefore important to take note of the content of the individual assessment profiles, including any commentary which highlights areas which could be more sensitive to wind energy, solar PV and BESS developments.

Sensitivity Assessment results

3.4 Against a five-point scale of landscape sensitivity to renewable energy development, no Landscape Character Types (LCTs) were found to be of low sensitivity. This reflects the settled, urban nature of the Council area, the value of the surrounding landscape resource, the number and distribution of sensitive visual receptors, and the importance of the landscape in forming part of the setting and identity of Edinburgh.

3.5 Overall, most LCTs were found to be of medium-high, or high sensitivity to wind energy development of all scales, with the exception of the Lowland Farmland LCT which is of medium sensitivity to small to medium turbines (typically 50-149.9m blade tip height).

3.6 Overall, many LCTs were found to be of medium-high or high sensitivity for medium to large solar PV (5-20 hectares) and BESS (1-15 hectares) developments. The Lowland Farmland, Rolling Farmland and Settled Farmland LCTs were found to be of medium sensitivity to small solar PV (under 5 hectares) and small BESS (under 1 hectare) developments.

3.7 A medium sensitivity level means that this part of the landscape may have some ability to accommodate renewable energy development, but with alteration to its key characteristics and qualities. As for all parts of the landscape, the introduction of a proposal to an area of medium sensitivity will require careful siting and design.

3.8 The overall results of the landscape sensitivity assessment are set out in Tables 3.1 and 3.2 and shown on Figure 3.1 to Figure 3.6 below.

Table 3.1: Overall landscape sensitivity to wind energy development

LCT	Small to Medium Wind Turbines	Large Wind Turbines
Lowland Farmland	Medium	Medium-high
Pentland Flanks	High	High
Pentland Hills – Upper Slopes and Summits	High	High
Policy Landscape	High	High
Recreational Open Space	High	High
Rolling Farmland	Medium-high	High
Rural Outcrop Hills	Medium-high	High
Settled Farmland	Medium-high	High

Table 3.2: Overall landscape sensitivity to solar PV/BESS development

LCT	Small Solar PV	Medium to Large Solar PV	Small BESS Installation	Medium to Large BESS Installation
Lowland Farmland	Medium	Medium-high	Medium	Medium-high
Pentland Flanks	Medium-high	High	Medium-high	High
Pentland Hills – Upper Slopes and Summits	High	High	High	High
Policy Landscape	Medium-high	High	Medium-high	High
Recreational Open Space	Medium-high	High	Medium-high	High
Rolling Farmland	Medium	High	Medium	High
Rural Outcrop Hills	Medium-high	High	Medium-high	High
Settled Farmland	Medium	High	Medium	High

Guidance for accommodating wind, solar PV and BESS development in Edinburgh

3.9 The following section provides some generic guidance on siting renewable energy development in Edinburgh's landscape, focusing on minimising landscape and visual effects and making developments an accepted feature of the environment. While it is recognised that schemes need to be sited and designed to ensure operational efficiency, this is a matter for developers, and needs to be balanced with adequate mitigation of adverse landscape and visual effects. The siting and design of schemes is a key aspect of such mitigation.

3.10 All renewable energy development should aim to be sensitively sited.

3.11 The guidance provided below applies to all landscape within the study area, with reference to more specific LCTs provided (where relevant) as a secondary point.

Siting: Landform

- Site renewable energy development away from dramatic or rugged landforms or valued landform features. The most suitable sites are likely to be on large-scale smooth, convex or flat landforms. For example, site solar PV development on lower slopes/undulating lowlands, rather than upper slopes where they are more visually prominent.
  - Views of the Pentland Hills and Ridges LCT are particularly sensitive, and renewable energy development should avoid altering the distinctive profile of the ridgelines and summits, outward views from this landscape or the perception of scale which can be appreciated from the surrounding landscape.
  - Whilst relatively modest in scale, the perception of contrast in landform between the Rural Outcrop Hills LCT and the surrounding lowland farmland is an important consideration. Introduction of wind turbines on these hills should be avoided. Introduction of turbines within the landscape surrounding these hills, where the appreciation of these locally distinct landform features would be altered, should be avoided.
  - Undulations, particularly those associated with rivers or burns, or local high points in the gentler rolling landscape of the Lowland Farmland, Settled Farmland and Policy Landscape LCTs should be avoided.

Siting: Land cover and scale

- Select sites in a simple, regular landscape with extensive areas of consistent ground cover over a landscape with more complex or irregular land cover patterns, smaller field sizes and landscape with frequent human scale features (subject to avoiding other sensitivities).
  - Parts of the Lowland Farmland LCT with a relatively simple and regular pattern of arable farmland may present opportunities for siting of solar PV or BESS development. Areas with a higher density of wooded field boundaries, hedgerow trees, small areas of policy woodland and riparian woodland should be protected and enhanced.
  - Parts of the Settled Farmland LCT with existing infrastructure or brownfield land uses are considered less sensitive to the introduction of renewable energy development. Patches of mixed woodland, including areas of Ancient Woodland and policy woodland, grassland and scrub (including gorse) should be protected and enhanced.
- Setting development within an existing or enhanced landscape framework of hedges, woodland/tree belts and stone walls is preferable to changing the landscape pattern.
- Avoid areas with a concentration of semi-natural habitats, which contribute to a sense of naturalness in the landscape.
- Consider locations associated or adjacent to existing hard surfacing or built elements (e.g. light industrial or quarry sites) where other landscape sensitivities are not compromised. Landscape mitigation associated with development in these areas should seek to enhance the landscape framework, through reinforcement of existing features or the introduction of new hedges, woodland or tree belts, in order to soften the appearance of development in views from the wider landscape. Native tree or shrub species should be used for any planting.
- Consider potential effects of transporting turbines and solar PV panels to site, and the possible limitations presented by winding narrow roads bounded by hedgerows and trees, or stone walls.

Siting: Historic character and designated areas

- Avoid siting renewable energy development on landscape with intrinsic historic landscape character, such as the areas of remnant policy landscape with a strong legibility of historic features. Areas with a surviving historic field or woodland pattern should be retained and enhanced.

- Protect the landscape character of Conservation Areas (including views integral to their character), the setting to Scheduled Monuments and Listed buildings (where the character of the landscape is an important part of an historic asset's setting), and GDLs (including views to and from the historic landscape, particularly planned vistas).
- Ensure siting of renewable energy development does not adversely affect the distinctive characteristics and special qualities of Local Landscape Areas as set out in the LLA Statements of Importance.

Siting: Visual receptors and visual character

- Significant effects on views from important recreational routes, destinations with important recreational value, popular tourist and scenic routes and settlements should be avoided where possible or minimised through careful siting.
- Avoid selecting sites on important undeveloped or distinctive skylines, or skylines with important cultural or historic landmark features.
    - Siting of development should avoid changes to views towards important landmarks, such as the Pentland Hills, Firth of Forth and Forth Bridges, local hills, and the distinctive skyline of the city centre, particularly where these views contribute to a sense of place or gateway function in the landscape.
- Consider the landscape effects of transmission infrastructure when siting development, aiming for sites that will minimise the need for above ground transmission infrastructure. Undergrounding cables may mitigate effects in sensitive locations.
- Consider sites where areas of existing landscape components, such as woodland, high hedgerows or a framework of walls, could screen ground-level features of renewable energy developments (such as fencing, tracks and transformers) and solar PV panels rather than an open and unenclosed landscape. Since commercial scale wind turbines cannot be hidden, careful site selection as well as choice of turbine type and layout is the most effective way of minimising landscape and visual effects.

Siting: Perceptual and scenic qualities

- Avoid renewable energy development where it could detract from the undeveloped areas free from human influence and perceived 'naturalness', wildness or tranquillity. The Pentland Hills LCT and Pentland Flanks are particularly sensitive given the sense of naturalness and wild upland character expressed in the landscape.

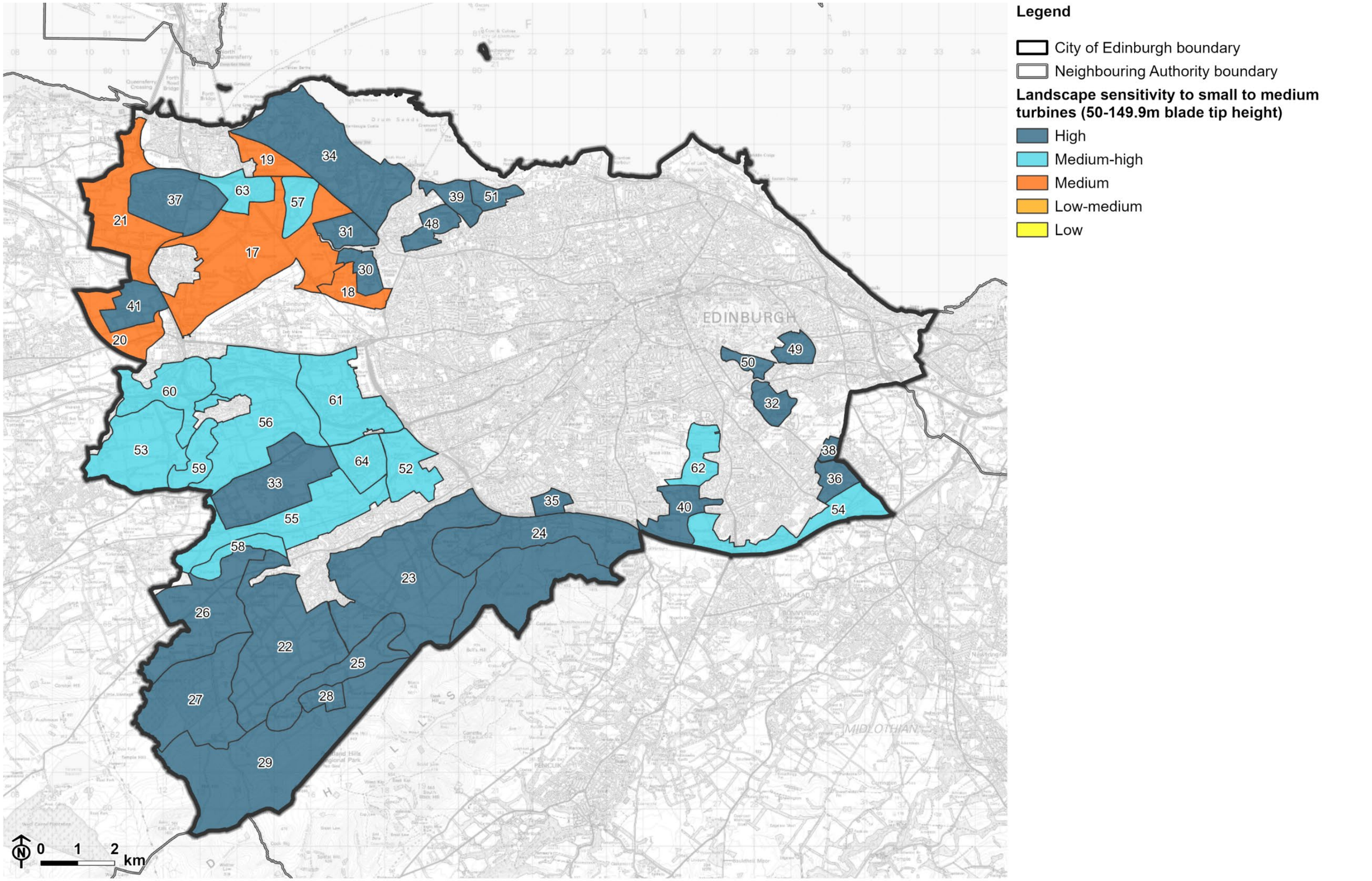
- Seek to keep developments within one landscape character type (particularly as perceived in sensitive views) so that the development does not span across marked changes in character on the ground, such as changes in topography. The introduction of wind turbines, solar PV panels or BESS installations should avoid altering the perception of the following transitions in the landscape:
  - Transitions between areas of more open farmland and the wooded Policy Landscape LCT which mark a change in land cover, pattern and the resulting sense of scale;
  - Transitions between summits, ridgelines and elevated slopes (mainly within the Pentland Hills LCT, Pentland Flanks LCT and Rural Outcrop Hills LCT) and adjacent cleughs, valleys or glens which mark a change in topography, land cover and the resulting sense of scale; and
  - Transitions between relatively flat or plateau-like landscape and incised burns or rivers which mark a change in topography, land cover and the resulting sense of scale.

Landscape management and enhancement

- Continue the existing land cover underneath the turbines or solar PV panels so that the landscape flows underneath and around these features, aiming to avoid significant alteration to valued elements of the landscape pattern. Continuity in land cover can create a stronger landscape pattern with more robust semi-natural habitats or reduce habitat fragmentation.
- Provide enhanced management of landscape features, habitats and historic assets as part of a development, referring to guidance in the Edinburgh Landscape Character Assessment and wider Council plans and strategies.
- Screening or filtering views of solar PV panels and BESS is important, and in areas with fragmented field boundary enclosure or amalgamated fields, hedgerow or shelterbelt restoration can provide landscape benefits. However, letting hedgerows grow higher should generally be employed where it fits with the local landscape character, and active management of hedgerows, or repair of walls, to fit with traditional approaches, should be continued. Native tree or shrub species should be used for any planting.
- The management or enhancement of wooded agricultural shelterbelts, historically associated with 18th and 19th century agricultural improvement, may improve the ability of the landscape to accommodate change, particularly where field patterns have been lost to amalgamation over time. Again, mixed native species should be used.

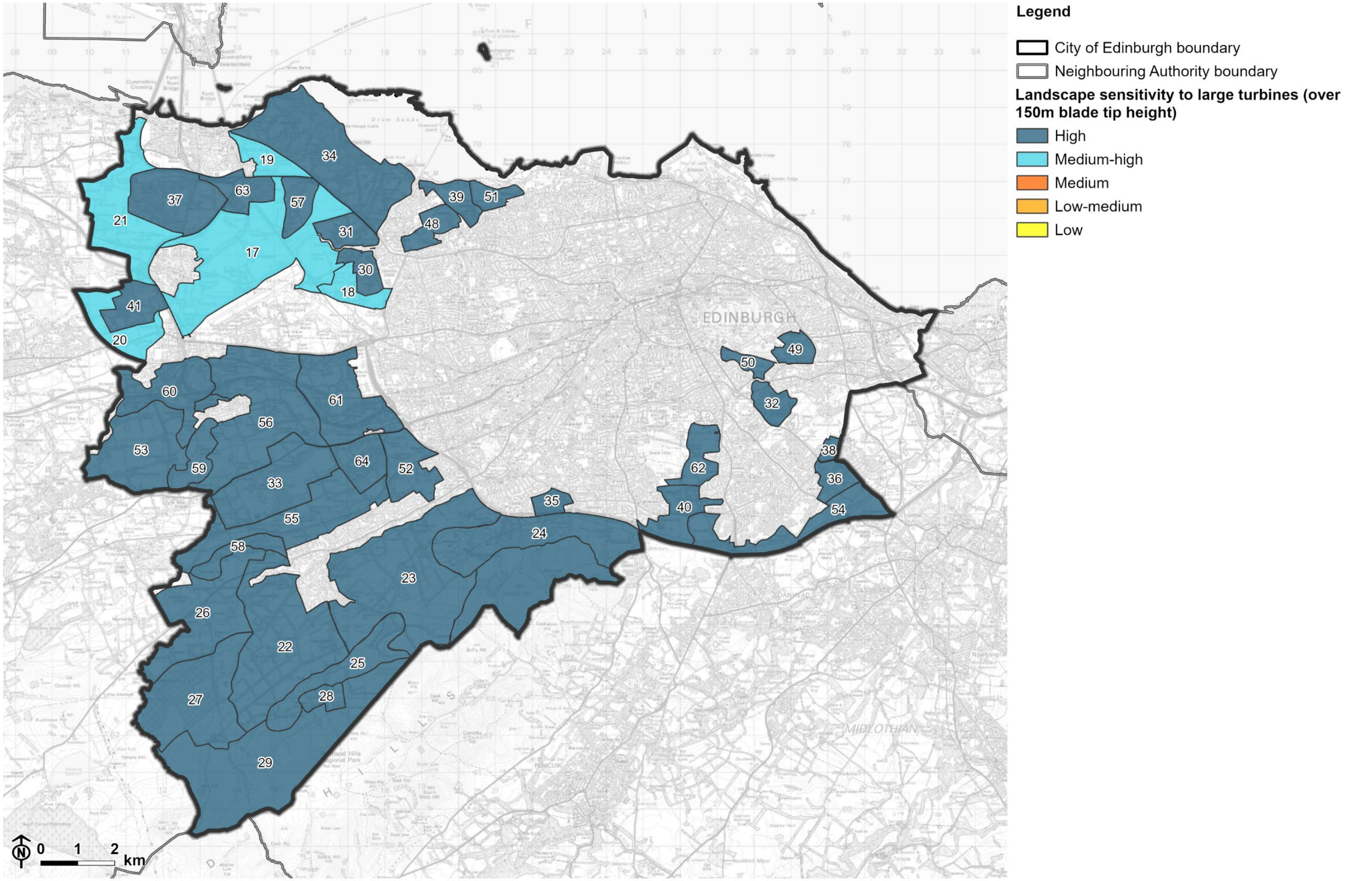
- Landscape improvements to provide screening to development or required access routes should avoid creating physical barriers to outdoor access. Further opportunities for local access and connectivity to the wider recreational networks should be identified where appropriate.

Figure 3.1: Landscape sensitivity to small to medium wind turbines



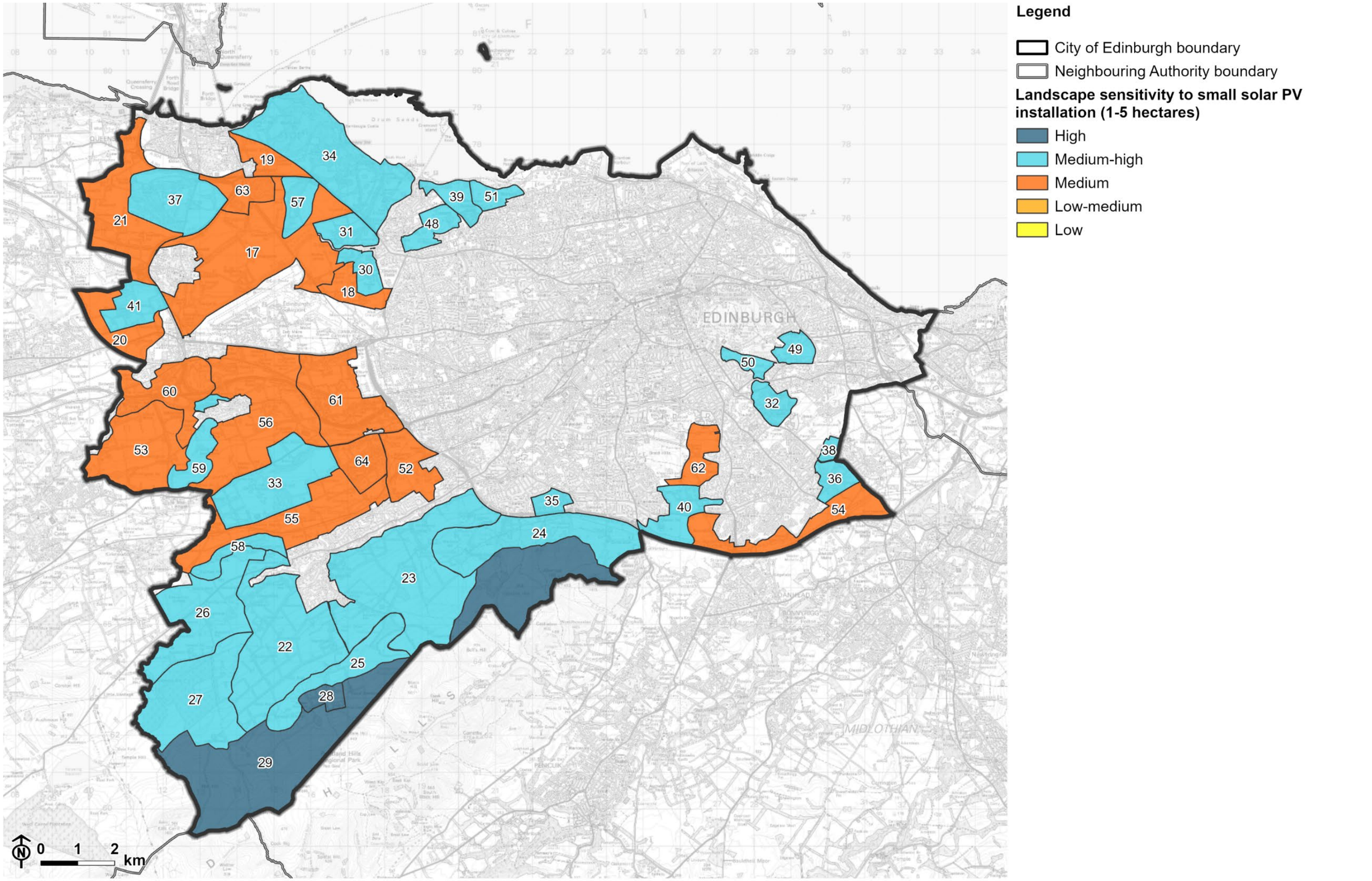
Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

Figure 3.2: Landscape sensitivity to large wind turbines



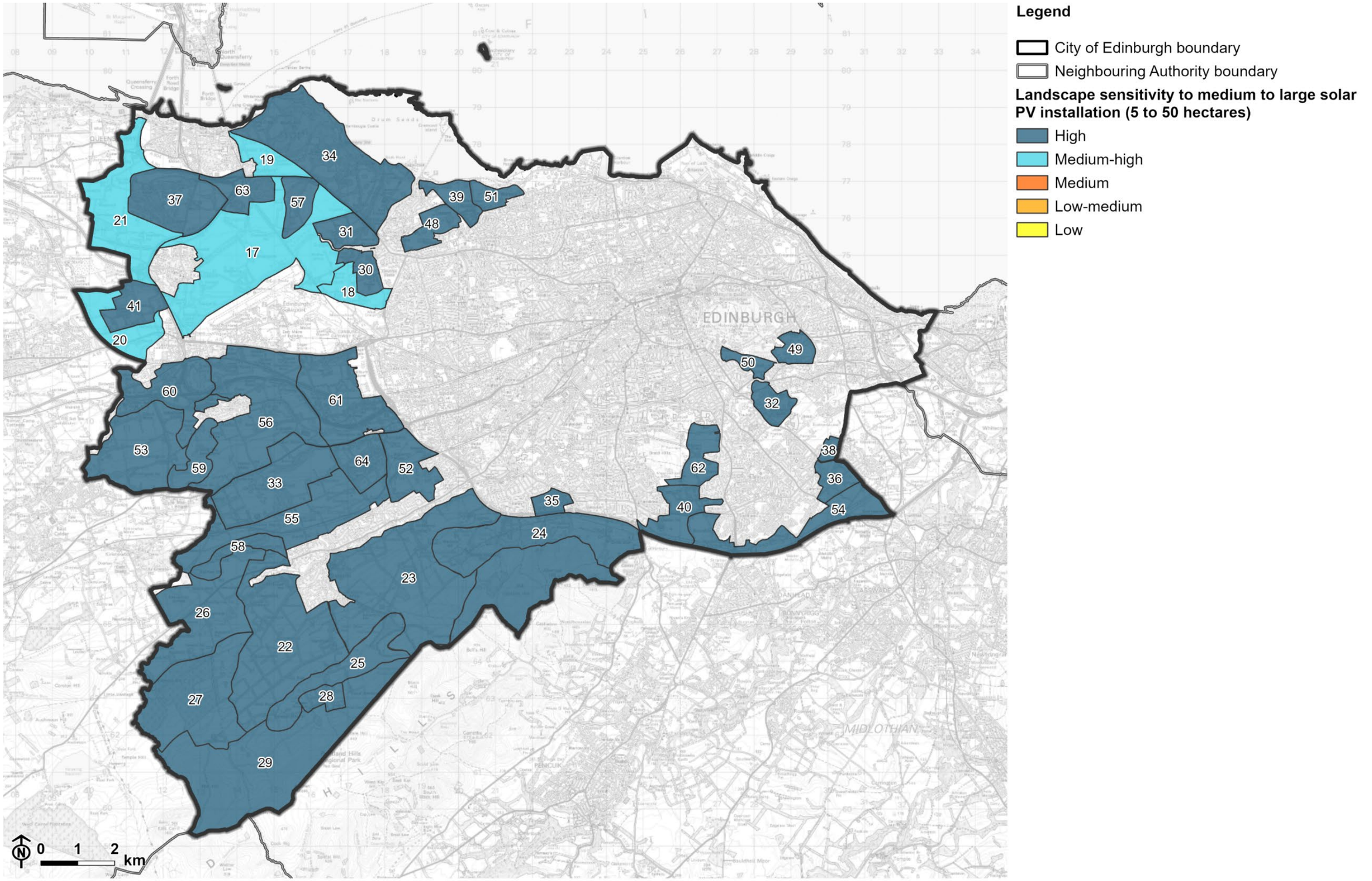
Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 13/02/2026

Figure 3.3: Landscape sensitivity to small solar PV



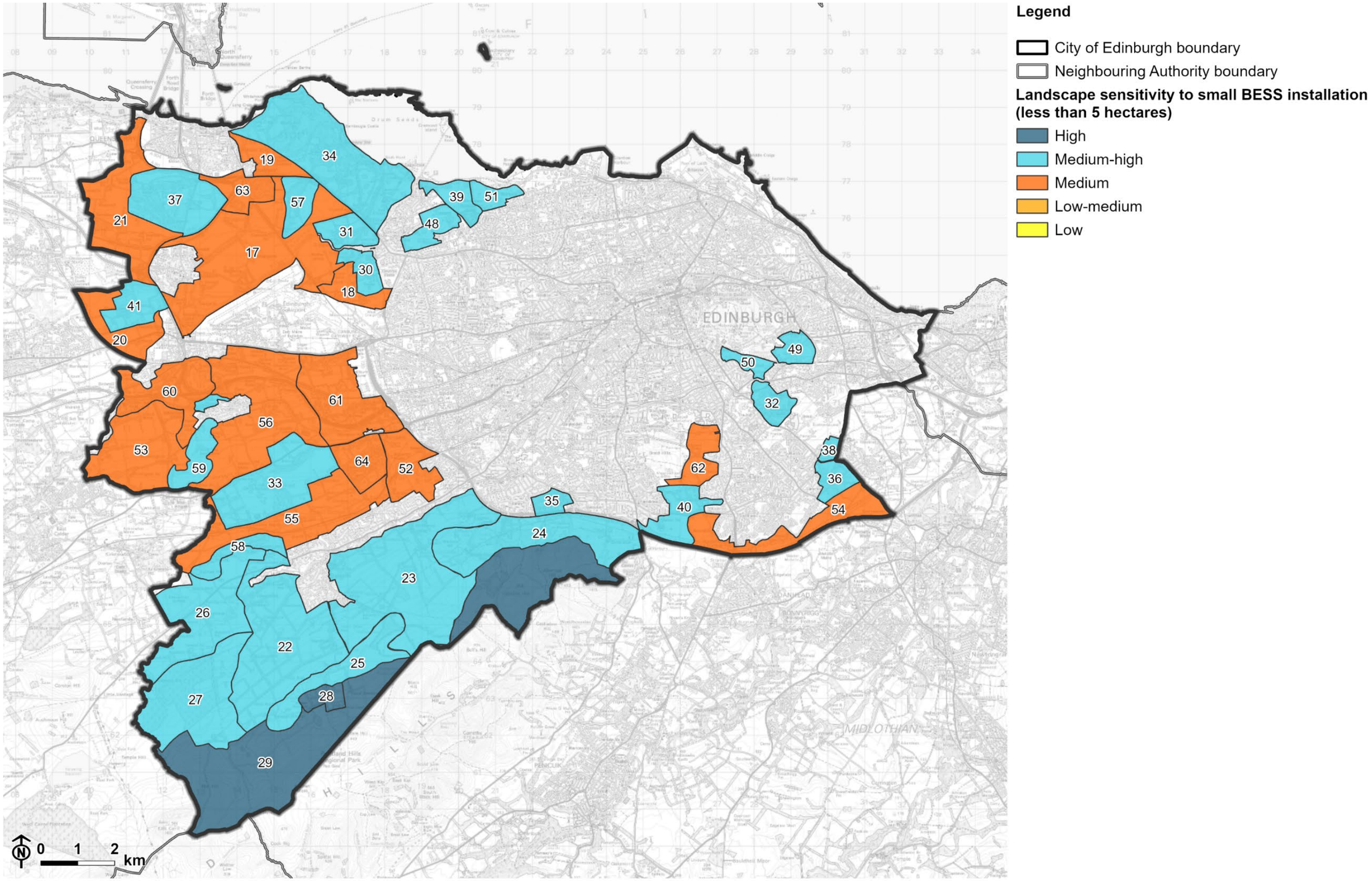
Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

Figure 3.4: Landscape sensitivity to medium to large solar PV



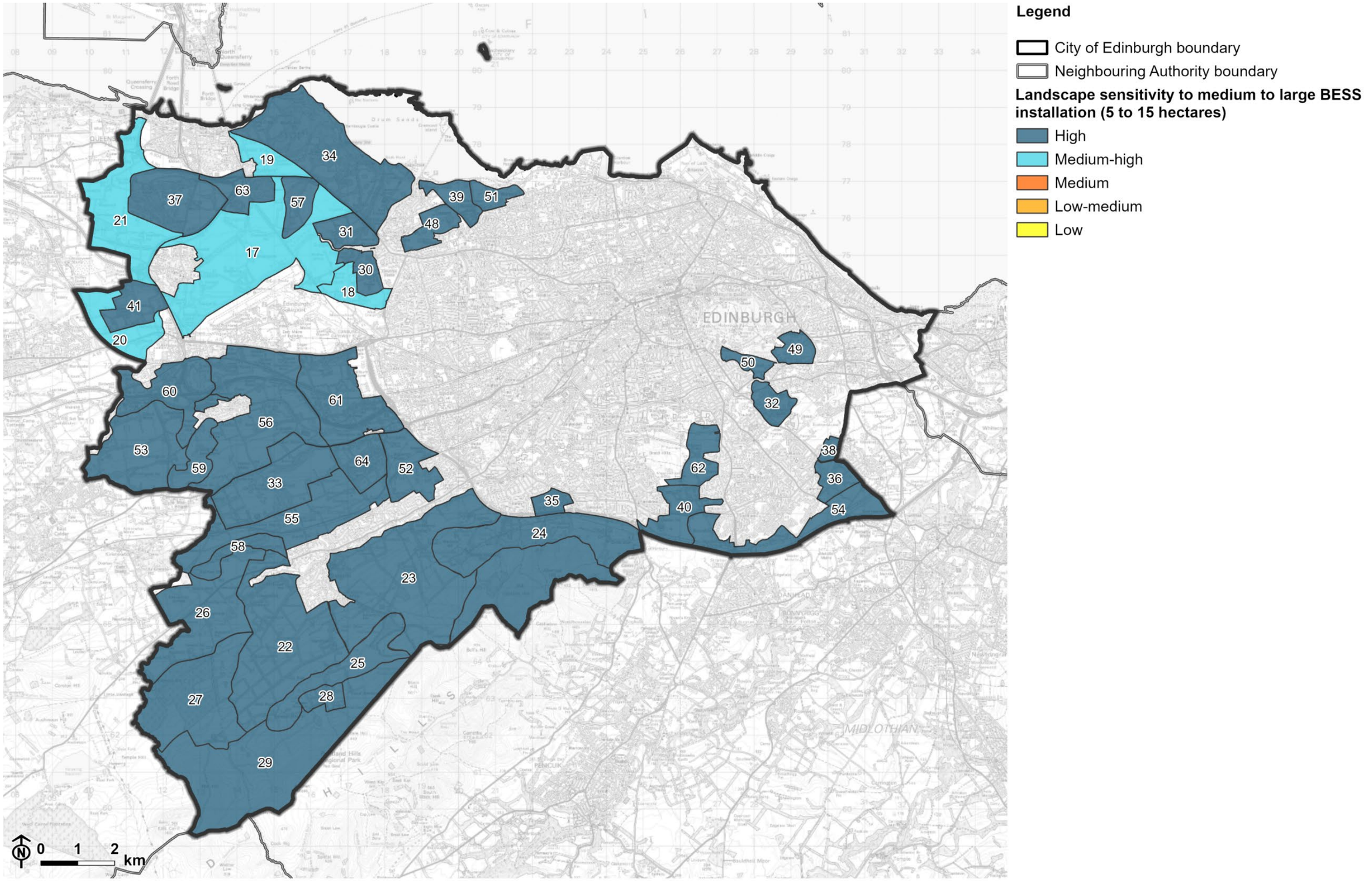
Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

Figure 3.5: Landscape sensitivity to small BESS installation



Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 12/02/2026

Figure 3.6: Landscape sensitivity to medium to large BESS installation



Created by LUC - 16181_004_LSA_Report/16181_001_r0_LSA 13/02/2026

Appendix A
Landscape Sensitivity Profiles

A.1 This appendix contains the landscape sensitivity assessment profiles for the LCTs within Edinburgh that were scoped into this study for detailed assessment.

Lowland Farmland LCT

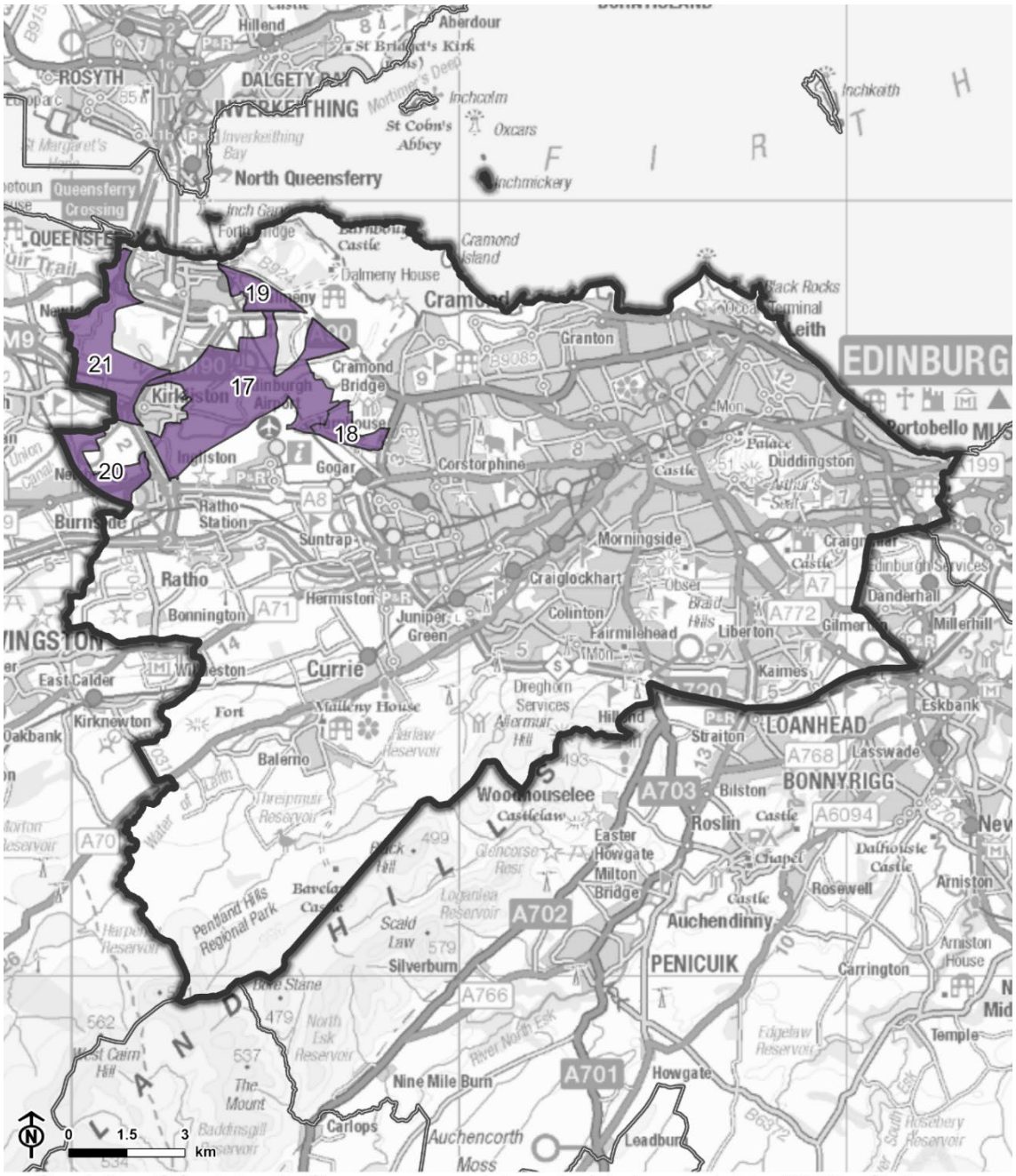
A.2 The Lowland Farmland LCT encompasses areas in the north-west of Edinburgh, broadly between Edinburgh Airport to the south and South Queensferry to the north. To the west, it extends to the West Lothian Council boundary. The LSA focuses on the elements of the LCT which are within the City of Edinburgh local authority area.

Landscape character overview

A.3 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Low-lying flat to gently undulating landform.*
- *Mixture of arable and pastoral farmland with medium to large fields with some hedgerows and field boundary trees and areas of policy woodland.*
- *Frequently crossed by transport corridors including railways and main roads.*
- *River Almond is the most significant watercourse.*
- *Dispersed settlement and villages.*
- *Open and simple landscape resulting from a combination of gently sloping topography and medium to large scale fields laid out in a regular pattern.*
- *Distant outward views are focused towards the Pentland Hills to the south, Corstorphine Hill and the city to the east, and Firth of Forth and Forth Bridges to the north.*
- *The Core Paths Network, including the Union Canal and its towpath, provide a recreational resource to the west of Edinburgh."*

Figure A.1: Contextual map of the Lowland Farmland LCT



City of Edinburgh boundary

Neighbouring Authority boundary

Lowland Farmland

Landscape Character Areas

A.4 The Lowland Farmland LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Almond Farmland (17)
- Cammo Fringes (18)
- Dalmeny Fringes (19)
- Newbridge/Broxburn Farmland (20)
- Newton Farmland (21)

Designated landscapes

A.5 A small part of the LCT is within the Craigie Hill LLA, but encompasses only the lower lying parts of this area. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- *"a locally distinctive landmark"*, *"which stands proud of gently undulating, open fields"*;
- *"Its wooded crest merges with and reinforces the parkland setting to the Dalmeny Estate to the north-east and woodland within the River Almond valley to the south"*; and
- *"the hill provides a viewpoint with glimpsed views overlooking wide vistas of the Dalmeny Estate and Firth of Forth to the north, and across the River Almond valley and towards the Pentland Hills to the south. More open views can be experienced from the fields around the base of the hill"*.

Existing renewables development

A.6 There are no operational or under construction wind farms or BESS developments in the LCT. There is one solar PV development of approximately 1.3 hectares near the sewage works in the south-west of the Almond Farmland LCA. Views towards another operational solar PV development near Edinburgh Airport, to the south of the Almond Farmland LCA, are generally screened or filtered by woodland.

A.7 Views to developments within the wider landscape are limited.

Figure A.2: Views toward the distant skyline of the Pentland Hills

Figure A.3: Views towards adjacent policy woodlands which coalesce to create a richly vegetated landscape

Landscape Sensitivity Assessment

A.8 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.9 Low-lying flat to gently undulating landform, with occasional more elevated locations, including the smaller-scale Lennie Hill (east of Edinburgh Airport), and the north of the Newton Farmland LCA. The topography descends gently down towards watercourses, of which the River Almond is the most significant.

A.10 The LCT has a relatively open character as a result of the pattern of medium or larger scale fields, particularly overlooking the slopes descending to the River Almond.

Sensitivity

A.11 The landform and scale of this landscape is of low-medium sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.12 Landcover is predominantly arable farmland, crossed frequently by main roads and railways, and the airport lying outside the area but having an influence upon it.

A.13 The field pattern is relatively simple and regular with boundaries frequently comprising hedgerows, with wire fencing and stone walls in places. Occasional mature deciduous trees are present in field boundaries providing some variation in the landcover.

A.14 There are areas of policy woodland associated with some of the lower-lying areas and edges of the LCT, as well as around water bodies, particularly along the River Almond. Denser woodland is present alongside the railways and main roads. The combination of wooded field boundaries, hedgerow trees, small areas of policy woodland and riparian woodland present human-scale features and result in some enclosure of views.

A.15 The LCT is sparsely settled, although with some dispersed farmsteads and properties adding further human-scale features. It is however widely visible from these properties, as well as more settled areas beyond, given its open character.

Sensitivity

A.16 The landcover of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.17 Designated historic assets within this LCT mainly include numerous Listed buildings associated with historic farmsteads or estates. Beyond these, there are relatively few designated historic assets within the LCT, however the undeveloped and traditional character of the landscape contributes to the setting of some Gardens and Designed Landscapes (GDLs) and Conservation Areas.

A.18 The Newliston GDL is located partially within this LCT in the south-west, and extends into the adjacent Newliston Policies LCA. There are several other GDLs associated with policy landscapes (located adjacent to the LCT); the fields within this landscape provide some context and contrast to the predominantly wooded landscapes of the GDLs.

A.19 The settlements of Dalmeny and South Queensferry contain Conservation Areas directly adjacent to the north of this LCT (near the Dalmeny Fringes LCA). Kirkliston Conservation Area is adjacent to the south-west of the LCT (near the Almond Farmland LCA). Throughout the LCT, there are numerous Listed buildings.

A.20 The LCT forms a relatively undeveloped context seen in views from Conservation Areas, particularly from Dalmeny where the landscape provides the foreground seen in focused views looking towards the Forth Bridges.

Sensitivity

A.21 The historic character of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Visual receptors

A.22 Whilst settlement within the LCT is limited, there are several settlements located near the LCT and views of the open landscape are experienced by receptors travelling to and from settled areas, along the network of transport routes which form key gateways into Edinburgh.

A.23 The landscape has a strong visual relationship with the settlements of South Queensferry, Dalmeny and Kirkliston, as well as the dispersed residential properties located throughout the LCT.

A.24 The path network (such as along the River Almond) and the National Cycle Network Route 1 provide recreational opportunities within the LCT. Views overlooking the LCT are also experienced by recreational receptors at local summits, such as Craigie Hill (within the Rural Outcrop Hill LCT), and the network of paths at Cammo (within the Policy Landscape LCT).

Sensitivity

A.25 The visual receptors of this landscape are of medium-high sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.26 The landscape is relatively open, with a gently undulating landform, although woodland filters some views. Policy woodland in adjacent LCTs encloses views looking to and from the landscape. More open views are afforded from the less wooded and elevated locations.

A.27 Skylines within the LCT are relatively simple, with views focused towards more distant horizons such as the Pentland Hills to the south, Corstorphine Hill and the city to the east, and Firth of Forth and Forth Bridges to the north. There are local views to prominent outcrops such as Craigie Hill (located within the Rural Outcrop Hills LCT). Frequent air traffic at the airport influences the skyscape, both visually and audibly.

A.28 The landscape has a strong visual relationship with the settlements of South Queensferry, Dalmeny and Kirkliston, and the relatively undeveloped character of the LCT contributes to the distinct settlement identities, and the contrast between the dense urban edge of north-west Edinburgh and these smaller settlements.

Sensitivity

A.29 The visual character of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Perceptual and scenic qualities

A.30 Small areas of woodland and linear tree belts coalesce in views with policy woodland in adjacent LCTs (e.g. connecting with woodlands of the Dundas Policies LCA and Cammo Policies LCA), giving the impression in places of a well-wooded landscape and contributing to scenic qualities more widely. Woodland also forms part of the setting of the historic Dalmeny village and contributes to an overall sense of seclusion or tranquillity.

A.31 The lack of settlement within the LCT contributes to the sense of a relatively undeveloped landscape, although with urban influences. Main roads on the edges of the area are not usually visually prominent due to intervening trees, but traffic noise can be evident.

A.32 The adjacent Edinburgh Airport is a prominent feature in views, including from the elevated Lennie Hill. The movement of planes to and from Edinburgh Airport results in a visible and audible influence on parts of the LCT.

Sensitivity

A.33 The perceptual and scenic qualities of this landscape are of medium sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.34 The Lowland Farmland LCT is of medium sensitivity to small to medium scale wind energy development, and of medium-high sensitivity to large scale wind energy development. The reasoning for this is summarised below:

- Landform is flat to gently undulating, with some smaller-scale features such as low hills and watercourses, with which the large vertical scale of wind turbines would conflict.
- Whilst the landcover is relatively simple, the small areas of trees often coalesce with woodland in adjacent Policy Landscape LCAs, giving the impression of a well wooded landscape and contributing to scenic qualities more widely. Large scale wind turbines would be at odds these human-scale features.
- Whilst there are few designated historic features within the LCT, the landscape contributes to the relatively undeveloped context of the Dalmeny and Kirkliston Conservation Areas. The introduction of medium or large wind turbines would result in visual clutter.

- Whilst settlement within the LCT is limited, there are several settlements located near the LCT and views of wind turbines would be widely experienced by receptors travelling to and from settled areas.
- The relatively undeveloped character of the landscape contributes to the distinct settlement identities and contrast between the dense urban edge of north-west Edinburgh and smaller settlements to the north-west and west.
- Whilst skylines within the LCT are relatively simple, wind turbines in these areas would alter distant views towards more distinctive skylines, such as the Pentland Hills to the south, Corstorphine Hill and the city to the east, the Firth of Forth and Forth Bridges to the north and Craigie Hill more locally.
- The landscape has a generally open character, in which wind turbines would be widely visible. Woodland filters some views, but is unlikely to substantially limit visibility of medium to large scale wind turbines.

Variations in sensitivity

A.35 The Dalmeny Fringes LCA is more sensitive to wind development due to the importance of woodland within the LCA in connecting to a wider wooded landscape (within the Dalmeny Policies LCA) and the setting formed to the historic Dalmeny Village Conservation Area, as well as the presence of views towards the Forth Bridges.

A.36 Other areas with a higher sensitivity to wind turbines include wooded ridges, skylines and areas bordering adjacent policy landscape. For example, from the Almond Valley LCA, there are views to the wooded Craigie Hill (a Local Landscape Area) which would be more sensitive to change.

Overall landscape sensitivity to solar PV and BESS developments

A.37 The Lowland Farmland LCT is of medium sensitivity to small solar PV and BESS development, and medium-high sensitivity to medium and large solar PV and BESS development. The reasoning for this is summarised below:

- Landform is flat to gently undulating, with some smaller-scale features such as low hills and watercourses. The ability to appreciate these smaller-scale features may be masked by solar PV and BESS development.
- Whilst the landcover is relatively simple, the small areas of woodland and trees often coalesce with woodland in adjacent Policy Landscape LCAs, giving the impression of a well wooded landscape and contributing to scenic qualities more widely. Whilst woodland presents opportunities to screen or filter views of

smaller or medium scale solar PV and BESS development, larger scale development would adversely alter the landscape pattern.

- When combined with the visibility of infrastructure (roads, railways and the airport) on the peripheries of the LCT, the potential loss or masking of landscape features and changes to landform as a result of larger scale solar PV and BESS, could alter the relatively undeveloped and tranquil character of the landscape.
- The absence of dense settlement gives a sense of a relatively undeveloped and traditional rural landscape, despite the proximity of Edinburgh, which larger scale development could detract from.
- The relatively undeveloped character of the landscape contributes to the distinct settlement identities and contrast between the dense urban edge of north-west Edinburgh and smaller settlements to the north-west and west, which may be altered by the introduction of solar PV or BESS development.

Variations in sensitivity

A.38 The Dalmeny Fringes LCA is more sensitive to solar PV and BESS development due to the importance of woodland within the LCA connecting to a wider wooded landscape (within the Dalmeny Policies LCA) and the setting of the historic Dalmeny Village Conservation Area, in addition to views towards the Forth Bridges. The introduction of solar PV and BESS development would alter the relatively undeveloped and semi-natural character of these parts of the landscape.

A.39 Other areas in which smaller scale rural landscape features such as woodlands, smaller fields and river valleys, with recreational links, prevail are more sensitive to the introduction of solar PV and BESS development, as the introduction of modern infrastructure may mask landform and detract from the smaller scale rural features.

Table A.1: Overall sensitivity scores of the Lowland Farmland LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	Medium
Large wind turbines	Medium-high
Small solar PV installation	Medium
Medium to large solar PV installation	Medium-high
Small BESS installation	Medium
Medium to large BESS installation	Medium-high

Pentland Flanks LCT

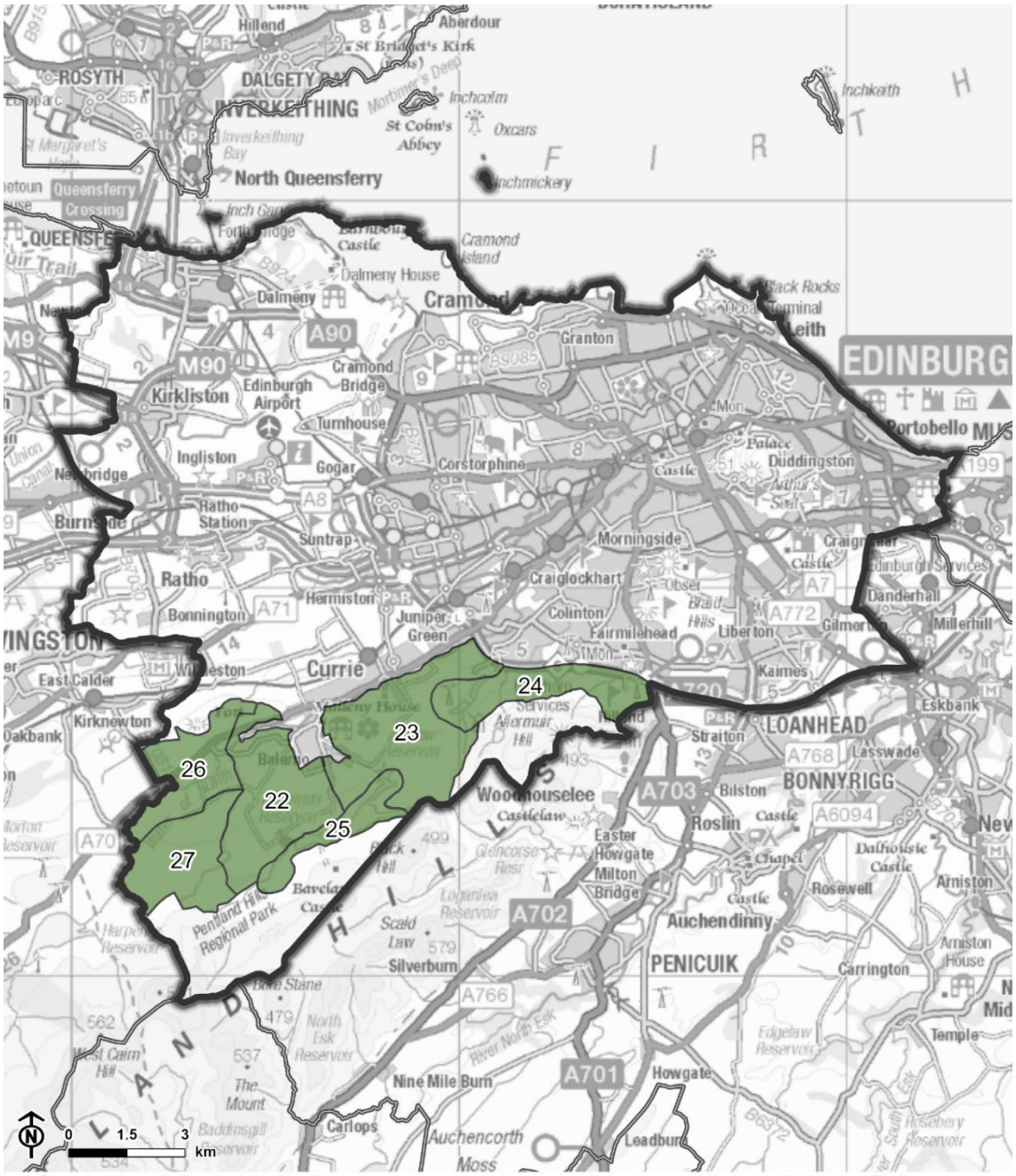
A.40 The Pentland Flanks LCT comprises the hillsides sloping towards an area of elevated hills and ridges (within the Pentland Hills – Upper Slopes and Summits LCT), located to the south-west of Edinburgh. It is connected to a wider range of upland fringes, extending into the neighbouring West Lothian local authority area. The LSA focuses on the elements of the LCT which are within the City of Edinburgh local authority area.

Landscape character overview

A.41 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Sloping hillsides rising up towards a ridgeline of hills, with some knolly outcrops.*
- *Upland vegetation with moorland pasture and some areas of gorse and scrub.*
- *Areas of forestry and woodland.*
- *Sparsely populated with scattered farmsteads.*
- *Deeply incised burns and some wetland areas with associated marshy vegetation and reservoirs.*
- *Not highly prominent due to 'stepping' up of landform which isolates this landscape character type from the more settled lowland areas, however provides the setting for the hills and ridges."*

Figure A.4: Contextual map of the Pentland Flanks LCT



City of Edinburgh boundary

Neighbouring Authority boundary

Pentland Flanks

Landscape Character Areas

A.42 The Pentland Flanks LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Cockburn Farmland and Shelterbelts (22)
- Currie Farmland Slopes (23)
- North Pentland Slopes (24)
- Redford Basin (25)
- Water of Leith Farmland Slopes (26)
- West Pentland Fringe (27)

Designated landscapes

A.43 The LCT overlaps with two LLAs: The Water of Leith LLA and the Pentland Hills LLA. The special qualities of the areas covered by the Water of Leith LLA are not considered relevant to the small area that extend into the Pentland Flanks LCT. The central and eastern area of the LCT is included in the Pentland Hills. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- *"a dramatic backdrop"*;
- The hills are *"one of the most prominent features of the city skyline and dominate the surrounding landscape"*;
- *"Recreation and enjoyment are a significant element of the landscape"*;
- *"provides an identifiable undeveloped skyline, setting and containment to the city and surrounding settlements"*;
- *"characterised by a regular layout of 18th-19th century fields, enclosed by stone walls, hedgerows, tree lines and shelterbelt planting"*;
- *"To the east, the landscape is more open in character"*;
- *"backdrop is key to the setting of the city and the well-managed agricultural landscape and reservoirs on the lower slopes, contributing to the high scenic value of the area"*;
- *"a rugged and wild character of rocky outcrops and windswept heather moorland, which contrasts with lower wooded glens and farmland"*; and
- *"Cultural influences across the landscape"*.

Existing renewables development

A.44 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT.

A.45 Operational wind farms in neighbouring local authority areas are visible from upper slopes of the area. This includes a cluster of operational wind farms to the west which span the border between West Lothian and South Lanarkshire, including: Harburnhead (22 turbines, 126m blade tip height), Pearie Law (6 turbines, 125m blade tip height), and Pates Hill (7 turbines,102m blade tip height).

Figure A.5: Views overlooking Threipmuir Reservoir towards Black Hill highlight a mixed landcover of grassland, woodland and shelterbelts that transition into the Pentland Hills

Figure A.6: Looking towards Harbour Hill, the upland vegetation and open landform of the Pentland Flanks LCT contributes to the natural perception of the Pentland Hills

Landscape Sensitivity Assessment

A.46 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.47 The landform ranges from medium to large in scale, with sloping hillsides rising towards the ridgeline of the Pentland Hills (within the Pentland Hills – Upper Slopes and Summits LCT), with some knolly outcrops.

A.48 The prominent, visible slopes gradually rise from 130m AOD where the landscape borders the Water of Leith and become steep in the north, where they reach a high point of 318m AOD at White Hill summit.

A.49 The character is generally open, though the deeply incised burns contribute to a sense of enclosure and have a smaller scale character, particularly at lower elevations.

Sensitivity

A.50 The landform and scale of this landscape is of high sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.51 The landcover is a mix of woodland, moorland and scrub. Large, open areas of upland vegetation are found in the south-east, particularly where the slopes transition into the Pentland Hills and Ridges LCT.

A.52 There are areas of woodland throughout the landscape, with significant areas of forestry to the west, that create a localised sense of enclosure.

A.53 There is a strong rectilinear field pattern around Cockburn Farmland and Currie Farmland, however field patterns become more irregular in the north of the LCT.

A.54 Basins and reservoirs are found below the upper parts of the flanks and are often enclosed by woodlands and the slopping landform.

A.55 The landscape is sparsely settled, with a small number of buildings associated with farms throughout the LCT. The lack of settlement contributes to a strong upland perception.

Sensitivity

A.56 The landcover of this landscape is of high sensitivity to wind and medium-high to solar PV and BESS development.

Historic landscape character

A.57 Along Glenbrook Road, a cluster of Listed 19th century properties, associated with policy woodlands contribute to the historic character of the Cockburn Farmland and Shelterbelts LCA. The geometric field pattern of the area contributes further.

A.58 The Currie Conservation Area, which centres around the Currie Kirk and the original historic village of Currie (located in the Water of Leith – Balerno to Juniper LCA), extends into the Pentland Flanks LCA to include the kirk's cemetery and surrounding open field. The historic village of Swanston forms the Swanston Conservation Area, comprising Edinburgh's only remaining thatched properties and their agricultural landscape setting, with panoramic views over Edinburgh.

A.59 The 15th century Lennox Tower to the west is a scheduled monument of national importance that contributes to a sense of time depth through its distinctive masonry.

A.60 Extending into the LCT, Malleny Garden at Balerno is associated with numerous Listed buildings and a National Trust for Scotland garden with 400-year-old yew trees, adding to the historic character or the area. The Balerno Conservation Area, which recognises the predominance of vernacular buildings in the area and their green setting, extends to include the Malleny Garden.

Sensitivity

A.61 The historic character of this landscape is of medium sensitivity to wind development, and medium sensitivity to solar PV and BESS development.

Visual receptors

A.62 The Pentland Flanks are valued for recreational opportunities and are designated as part of the Pentland Hills Regional Park. The north of the area is managed as part of Bonaly Country Park. The network of Core Paths and other paths and tracks provide access across the landscape and connect to a broader network of paths in the Pentland Hills – Upper Slopes and Summits LCT. The Clubbiedean

Reservoir, Harlaw Reservoir and Threipmuir Reservoir are popular for fishing and walking.

A.63 The Pentland Flanks border the settlements of Balerno, Bonaly, and Swanston, with residential properties having views of the LCA. The Edinburgh City Bypass also borders the northern edge of the LCT, increasing the number of visual receptors.

Sensitivity

A.64 The visual receptors of this landscape are of high sensitivity to wind development, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.65 The upper reaches of the slopes are visually prominent within Edinburgh and West Lothian, including being visually prominent in the east from the Edinburgh City Bypass and the south-west edge of Edinburgh. The lower slopes are less prominent in long distance views but play an important role in forming the setting of the Pentland Hills and Balerno. The landscape is also prominent in views from the Pentland Hills themselves and contributes to a wider rural landscape that contrasts the surrounding urban area.

A.66 Long, expansive views are available from along footpaths and summits at higher elevations.

A.67 At lower elevations, views are often limited by woodlands, creating a sense of enclosure.

A.68 Skylines are largely undeveloped, however pylons in the north of the LCT running parallel to the City Bypass create a more developed character.

Sensitivity

A.69 The visual character of this landscape is of high sensitivity to wind, and medium-high solar PV and BESS development.

Perceptual and scenic qualities

A.70 The wider area of the Pentland Hills is valued for its perception as a tranquil, naturalistic landscape that contrasts with the nearby urban area. The intervisibility between this area and the wider Pentland Hills contributes to the hills' highly scenic

quality. At lower elevations, areas of arable land enclosed by shelterbelts and woodland contribute to a rural perception of the landscape, providing a transition between the open, natural feeling Pentland Hills and the more urban settlements of Currie and Balerno. Woodland surrounding burns and reservoirs, also contributes to a sense of intimacy and naturalness.

A.71 At higher elevations, upland vegetation and views to the Pentland Hills and ridges give the landscape a wilder character and contributes to a sense of remoteness.

Sensitivity

A.72 The perceptual and scenic qualities of this landscape are of high sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.73 The Pentland Flanks LCT is of high sensitivity to all scales of wind energy development. The reasoning for this is summarised below:

- The Pentland Flanks form the setting of the distinctive Pentland Hills. Wind turbines located on steep slopes or at local summits may alter the perception and apparent scale of this wider landscape. The ground-level disturbance associated with wind turbines, including access tracks, would also alter the profile of the slopes.
- There is a high level of intervisibility between the Pentland Flanks and the surrounding landscape, including from key views in the Pentland Hills. Wind turbines and their associated ancillary infrastructure would be highly visible and would introduce new vertical scale indicators within the landscape.
- The varied nature of the landcover increases its sensitivity. While there are areas with a simpler landcover, particularly in the upper slopes, which would reduce sensitivity, the sloping nature of the landform would result in wind turbines of any height being highly visible within the landscape, along with the accompanying access track network.
- The Pentland Flanks provide the setting for a number of historic settlements and Conservation Areas. These more traditional and historic areas and their settings would be of high sensitivity. They are vulnerable to changes caused by large structures, which lead to the perception of the landscape around them being more developed.

- There is a perception of remoteness within the Pentland Flanks and wider Pentland Hills area, which benefits from the lack of infrastructure across much of its skyline. The addition of vertical structures would affect this perception.
- The Pentland Flanks are popular for recreation and provide access to a wider network of recreation within the Pentland Hills Regional Park. Wind turbines and associated ancillary infrastructure would alter the experience of accessing this landscape and the scenic quality of views experienced within it.

Variations in sensitivity

A.74 Sensitivity would be highest across the upper slopes and summits of the Pentland Flanks. Due to the openness of the landscape and elevation, the introduction of vertical structures would detract from the natural skyline. Associated infrastructure would also have a major impact on recreational access.

A.75 In West Pentland Fringe LCA to the south-west, the landscape would be somewhat less sensitive to wind development due its strongly modified nature as a result of commercial forestry. However, turbines and their associated infrastructure would be highly visible from the surrounding landscape due to the elevated nature of the area, resulting in sensitivity to wind energy development remaining high.

Overall landscape sensitivity to solar PV and BESS developments

A.76 The Pentland Flanks LCT is of medium-high sensitivity to small scales of solar PV and BESS development and high sensitivity to medium to large scales. The reasoning for this is summarised below:

- The sloping, open nature of the Pentland Flanks landform would result in high visibility of the reflective materiality of solar PV and the solid form of BESS containers.
- At lower elevations, where screening is possible, there may be areas of less sensitivity to solar PV and BESS, particularly where development can be fitted in within existing field patterns or screened by woodlands or within hollows. However, the visibility of the landscape from the Pentland Hills still results in a higher sensitivity. The reflective materiality of Solar PV arrays would be particularly apparent and contrasting in these views, seen against the areas of open moorland and historic field patterns.
- The remote and tranquil character of the Pentland Flanks would be negatively affected by solar PV and BESS, by introducing new human influences in an area which feels rural and undeveloped. BESS storage containers would be

highly visible, even with site appropriate paint finishes. Similarly, solar PV would alter the undeveloped nature of the area.

- The popularity of the Pentland Flanks for recreation and the scenic views experienced within the landscape increase sensitivity to solar PV/BESS. Land take associated with development and its associated security fencing and CCTV may further alter the recreational experience of the landscape.

Variations in sensitivity

A.77 The upper Pentland Flanks would be of the highest sensitivity to solar PV and BESS development due to their openness, visibility with the surrounding landscape and the role these areas provide in accessing the recreation of Pentland Hills.

A.78 In the West Pentland Fringe LCA to the south-west, the landscape would be less sensitive to solar PV and BESS due its strongly modified nature as a result of commercial forestry and more limited connections to broader recreation networks. However, due to the nature of rotational felling of commercial woodland, the siting and mitigation for development should consider how woodland screening would change over time.

Table A.2: Overall sensitivity scores of the Pentland Flanks LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	High
Large wind turbines	High
Small solar PV installation	Medium-high
Medium to large solar PV installation	High
Small BESS installation	Medium-high
Medium to large BESS installation	High

Pentland Hills – Upper Slopes and Summits LCT

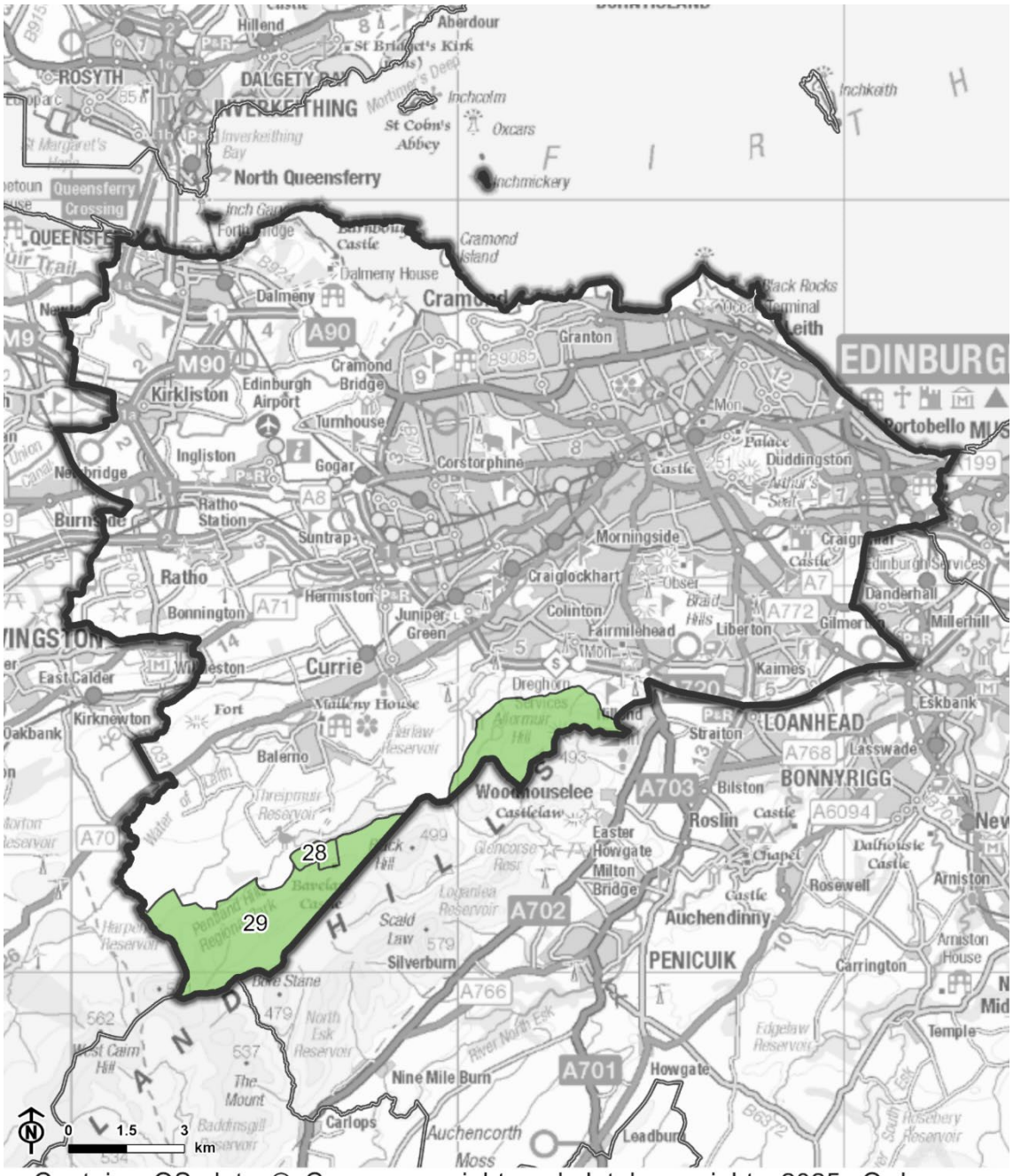
A.79 The Pentland Hills – Upper Slopes and Summits LCT comprises part of a wider area of elevated hills and ridges, located to the south-west of Edinburgh and extending into the neighbouring West Lothian, Midlothian and the Scottish Borders local authority areas. The LSA focuses on the elements of the LCT which are within the City of Edinburgh local authority area.

Landscape character overview

A.80 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Steeply rising hills above the adjacent low lying plain with a series of tops extending to the south west;*
- *Cut by deep valleys, some with reservoirs and incised burns;*
- *Heather and grass moorland covers the slopes and hills contributing an upland character;*
- *There are few isolated and scattered properties within the landscape;*
- *The area is well used for recreation and numerous paths and tracks cross the landscape;*
- *The topography makes this area highly visible and provides extensive views to and from the surrounding area."*

Figure A.7: Contextual map of the Pentland Hills – Upper Slopes and Summits LCT



City of Edinburgh boundary

Neighbouring Authority boundary

Pentland Hills - Upper Slopes and Summits

Landscape Character Areas

A.81 The Pentland Hills – Upper Slopes and Summits LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Bavelaw Farmland and Shelterbelts (LCA 28)
- Pentland Hills and Ridges (LCA 29)

Designated landscapes

A.82 The whole of the LCT is within the Pentland Hills LLA. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- *"a dramatic backdrop"*;
- The hills are *"one of the most prominent features of the city skyline and dominate the surrounding landscape"*;
- *"Recreation and enjoyment are a significant element of the landscape"*;
- *"provides an identifiable undeveloped skyline, setting and containment to the city and surrounding settlements"*;
- *"characterised by a regular layout of 18th-19th century fields, enclosed by stone walls, hedgerows, tree lines and shelterbelt planting"*;
- *"To the east, the landscape is more open in character"*;
- *"backdrop is key to the setting of the city and the well-managed agricultural landscape and reservoirs on the lower slopes, contributing to the high scenic value of the area"*;
- *"a rugged and wild character of rocky outcrops and windswept heather moorland, which contrasts with lower wooded glens and farmland"*; and
- *"Cultural influences across the landscape"*.

Existing renewables development

A.83 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT.

A.84 Operational wind farms in neighbouring local authority areas are visible from the LCT, particularly its elevated ridgelines. This includes a cluster of operational wind farms to the west which span the border between West Lothian and South

Lanarkshire, including: Harburnhead (22 turbines, 126m blade tip height), Pearie Law (6 turbines, 125m blade tip height), Pates Hill (7 turbines,102m blade tip height), Longhill Burn (8 turbines, 200m blade tip height), Tormywheel (15 turbines, 102m blade tip height) and Muirhall (6 turbines, 125m blade tip height).

A.85 Wind farms are also visible in the Moorfoot Hills to the south (in the Scottish Borders), including Bowbeat (24 turbines, 80m blade tip height) and Carcant (3 turbines, 105m blade tip height). A cluster of wind farms at Dun Law are visible to the south-east, including Dun Law Phase 1 (26 turbines, 63.5m blade tip height), Dun Law Phase 2 (35 turbines, 75m blade tip height), and within East Lothian, Keith Hill (5 turbines, 76m blade tip height) and Pogbie (6 turbines, 76m blade tip height).

Figure A.8: Views towards the dramatic skyline formed by the Pentland Hills

Figure A.9: Panoramic views across Edinburgh and the Firth of Forth, experienced from the summit of Allermuir Hill

Landscape Sensitivity Assessment

A.86 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.87 North and north-west facing slopes rise to a prominent ridgeline with well-defined summits, including the hills of Allermuir and Caerketton.

A.88 The landform is large in scale, with lower slopes of 225-300m AOD rising to summits generally exceeding 450m AOD, with a maximum of 493m AOD at Allermuir Hill.

A.89 Ridgelines, slopes and summits have an open and exposed character, whereas cleughs are more enclosed and smaller in scale.

Sensitivity

A.90 The landform and scale of this landscape is of high sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.91 Landcover is relatively simple, predominantly defined by heather, heathland scrub and grassy moorland with some smaller areas of wet peaty bog, open water and burns. Small areas of woodland, including coniferous blocks, are scattered across mid and lower slopes. The upland character and general lack of overt human influences contribute to a strong sense of naturalness.

A.92 Enclosed fields are found near Bavelaw. Fields are medium in scale and defined by a robust framework of deciduous and coniferous wooded field boundaries, contributing to a more complex landscape pattern. Elsewhere stone walls, or wire fences are more common, and are in keeping with the exposed and simple upland character.

A.93 Settlement is very limited, with a small number of properties and farms near Bavelaw presenting human-scale features.

Sensitivity

A.94 The landcover of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.95 Whilst the Pentland Hills, broadly, are steeped in history, evidence of previous occupation of the landscape (in the form of designated heritage assets) is limited within this area.

A.96 The Listed Bavelaw Castle contributes to a sense of history locally in the landscape, although surrounding woodland limits the influence of this historic feature more widely.

A.97 The Pentland Hills contribute to the setting of historic settlements located close to the footslopes of the hills, including parts of Balerno, Currie, Juniper Green and Swanston designated as Conservation Areas.

Sensitivity

A.98 The historic character of this landscape is of medium sensitivity to wind development, and low-medium sensitivity to solar PV and BESS development.

Visual receptors

A.99 The Pentland Hills area is valued for its recreational opportunities and is designated as a Regional Park. Recreational opportunities are also recognised as a special quality of the Pentland Hills LLA. The north-west of the area is managed as part of Bonaly Country Park. The network of Core Paths and other paths and tracks provide access the landscape, and a promoted panoramic viewpoint is located on the summit of Allermuir Hill.

A.100 Whilst the Pentland Hills are not settled or immediately adjacent to settled areas, the slopes, ridgeline and summits of the Pentland Hills are widely intervisible with the city and smaller settlements to the west of the City Bypass.

Sensitivity

A.101 The visual receptors of this landscape are of high sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.102 The landscape is visually prominent within Edinburgh and the Lothians more widely. Its ridges and summits are visible from surrounding areas of undeveloped or less developed, peri-urban and urban landscape.

A.103 Long, expansive and panoramic views are available from open summits and ridgelines, emphasising the large-scale nature of the landform and reinforcing the sense of openness.

A.104 Skylines are undeveloped, with distinct ridges and summits marking the horizons. The general absence of vertical structures maintains the area's open and natural skyline.

A.105 Visual enclosure is created by narrow, incised cleughs, within the landscape of enclosed fields near Bavelaw, and near Bonaly Reservoir, offering contrasting pockets of intimacy within a broader open landscape.

Sensitivity

A.106 The visual character of this landscape is of high sensitivity to wind, solar PV and BESS development.

Perceptual and scenic qualities

A.107 The contrast between heather moorland and lower wooded glens, and the dramatic landform of the hills contribute to scenic qualities and is recognised in its reasons for designation as the Pentlands LLA.

A.108 The upland character and general lack of features shaped by people contribute to a sense of remoteness and tranquillity, despite the proximity of the landscape to urbanised areas.

Sensitivity

A.109 The perceptual and scenic qualities of this landscape are of high sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.110 The Pentland Hills – Upper Slopes and Summits LCT is of high sensitivity to all scales of wind energy development. The reasoning for this is summarised below:

- The Pentland Hills form distinctive ridges with steep slopes and well-defined summits. Wind turbines located on steep slopes or at hill tops would detract from these distinctive features and may alter the perception of the large-scale landscape by adding tall vertical scale indicators. Access tracks and other ground-level disturbance associated with wind turbines would alter the profile of slopes.
- Narrow glens incised by burns are more contained in character, however wind turbines would detract from the smaller scale and intimate character of these areas.
- The Pentland Hills provide a backdrop and setting to Edinburgh and the Lothians, and are widely visible to and from these areas of the landscape, including from historic settlements designated as Conservation Areas. Wind turbines and associated ancillary infrastructure, including access tracks, would be highly visible from a wide area.
- The Pentland Hills are popular for recreation and the scenic quality of views experienced within the landscape, mainly related to the simple but dramatic upland character, is high.
- Whilst the landcover of the Pentland Hills is relatively simple, the upland character and lack of development contribute to a strong sense of naturalness and seclusion. Wind turbines and associated ancillary infrastructure would detract from the experience of naturalness and remoteness, by introducing prominent human elements into the landscape.

Variations in sensitivity

A.111 There are no variations in sensitivity to wind energy development within the LCT.

Overall landscape sensitivity to solar PV and BESS developments

A.112 The Pentland Hills – Upper Slopes and Summits LCT is of high sensitivity to all scales of solar PV and BESS development. The reasoning for this is summarised below:

- The reflective materiality of solar PV panels and the solid form and scale of battery storage containers for BESS development would be highly visible on steep, exposed slopes and may detract from the appreciation of dramatic landform by drawing the eye away from the distinctive ridgeline of summits.
- Narrow cleughs incised by burns, the landscape of enclosed fields near Bavelaw, and the area near Bonaly Reservoir are more contained in character, although the materiality and scale of solar PV panels and BESS development, including associated infrastructure such as access tracks and security fencing, would contrast with the intimate scale and naturalistic qualities of these areas of the landscape.
- The Pentland Hills provide a backdrop and setting to Edinburgh and the Lothians, including from historic settlements designated as Conservation Areas. Solar PV panels and BESS developments would alter the upland character of the hills, which can be appreciated widely from the surrounding areas of landscape.
- The Pentland Hills are very popular for recreation and the scenic quality of views experienced within the landscape is high. Land take associated with development and its associated security fencing may further alter the recreational experience of the landscape.
- Whilst the landcover of the Pentland Hills is relatively simple, the upland character and lack of development contribute to a strong sense of naturalness and seclusion. Solar PV panels and BESS development would detract from the experience of naturalness and remoteness, by introducing prominent human influences.

Variations in sensitivity

A.113 There are no variations in sensitivity to solar PV/BESS development within the LCT.

Table A.3: Overall sensitivity scores of the Pentland Hills - Upper Slopes and Summits LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	High
Large wind turbines	High
Small solar PV installation	High
Medium to large solar PV installation	High
Small BESS installation	High
Medium to large BESS installation	High

Policy Landscape LCT

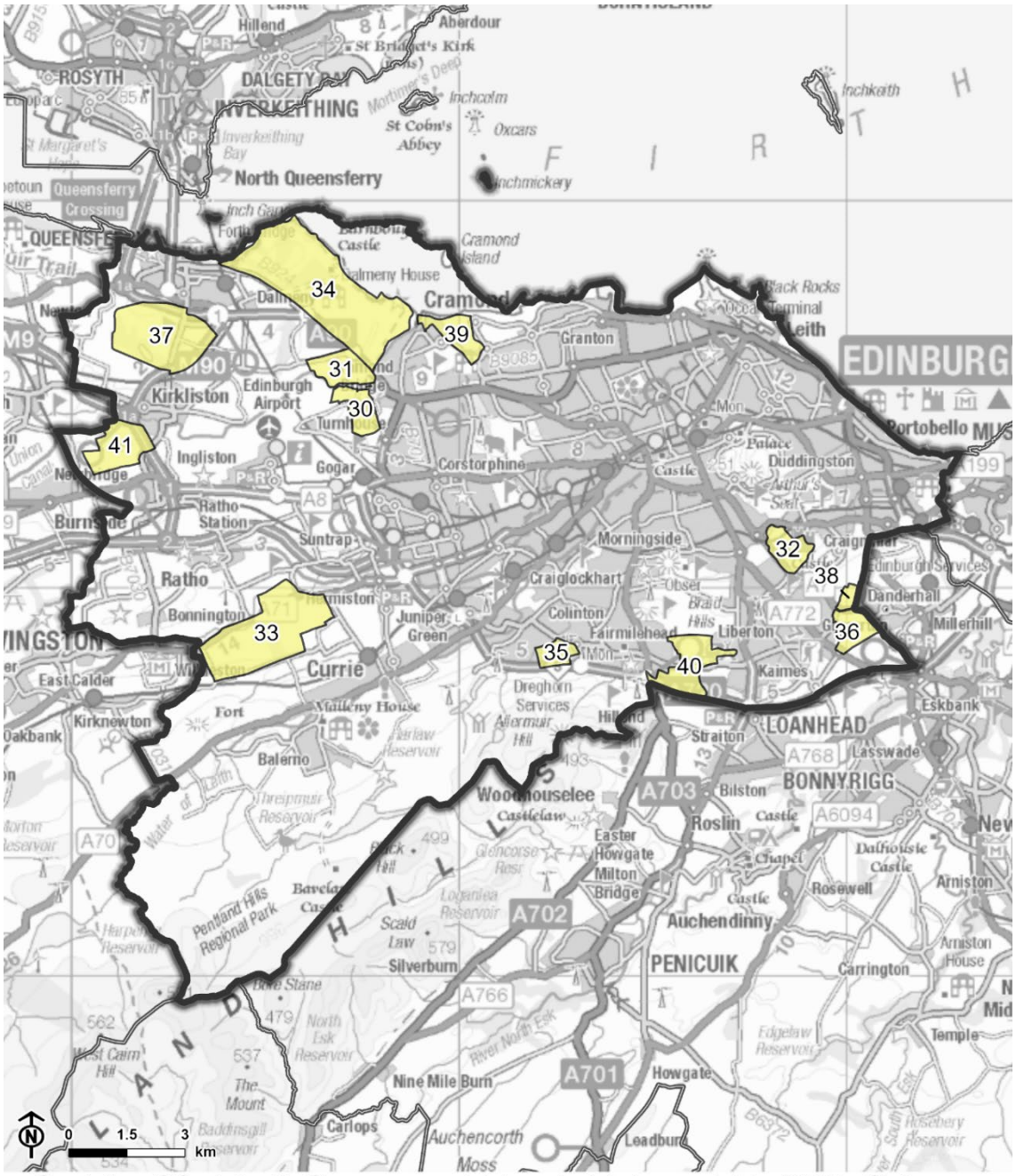
A.114 The Policy Landscape LCT encompasses numerous separate areas, mainly focused in the north-west, west and south-east of Edinburgh. These areas are associated with the designed landscapes of historic estates, often surrounding a central stately home and situated amidst lowland or rolling farmland.

Landscape character overview

A.115 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Varied landform, although where a central house exists it is frequently located on a low rise.*
- *Mature woodland in the form of tree groups, avenues and parkland surrounding areas of farmland or recreational land use.*
- *Central residence and other estate properties of varying age (although predominantly 18th century), in varied states of preservation.*
- *Strong boundary features, typically comprising stone walls with perimeter trees.*
- *Settlement may extend up to some of the estate boundaries, although the majority remain connected to the nearby farmland or other landscape features.*
- *Woodland and rolling landform result in an enclosed character, although some historic buildings form landmarks in the landscape more widely."*

Figure A.10: Contextual map of the Policy Landscape LCT



City of Edinburgh boundary
Neighbouring Authority boundary
Policy Landscape

Landscape Character Areas

A.116 The Policy Landscape LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Cammo Policies (30)
- Craigiehall Policies (31)
- Craigmillar Policies (32)
- Dalmahoy Policies (33)
- Dalmeny Policies (34)
- Dreghorn Policies (35)
- Drum Policies (36)
- Dundas Policies (37)
- Edmonstone Policies (38)
- Lauriston Policies (39)
- Mortonhall Policies (40)
- Newliston Policies (41)

Designated landscapes

A.117 The LCT includes the Southern Forth Coast LLA, Dundas LLA, Cammo LLA, Craigmillar Castle LLA, The Drum LLA, Braids, Liberton and Mortonhall LLA, and Pentlands LLA.

A.118 The reasons for designation (LUC, 2026) of relevance to the LCT are summarised as follows:

- Strong sense of history provided by the estate houses, castles, intact boundary walls and original features of designed landscapes;
- Extensive policy woodlands integrated into designed landscapes which are largely intact, and contribute to a well-wooded landscape;
- The landscape often forms part of a wider green swathe, contributing to a sense of naturalness and tranquillity within the landscape more broadly (for example at Craigmillar Castle LLA and The Drum LLA);
- The landscape often forms a backdrop in views from settled areas;

- Distant views are afforded, including looking towards the Pentland Hills, Edinburgh city skyline, Firth of Forth, the Forth Bridges and Fife beyond, contributing to scenic value;
- The coastal qualities associated with the Southern Forth Coast LLA contrasts with the parkland of the policy landscapes further inland to provide scenic interest;
- A sense of the landscape retaining a strong rural or traditional character is experienced, particularly from The Drum LLA and the Braids, Liberton and Mortonhall LLA; and
- Strong recreational opportunities provided by long distance walking/cycling routes, a network of well used local paths which are widely accessible to nearby communities, and golf courses, often with publicly used paths through perimeter tree belts.

Existing renewables development

A.119 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT.

A.120 Views towards renewable developments in the wider landscape are limited. Wind turbines within Fife are visible where open views across the Firth of Forth are available, for example from the Lauriston Policies and Dalmeny Policies LCAs. Individual turbines can also be seen in distant views from the Mortonhall Policies LCA, and wind farms can be seen in distant views from the Craigmillar Policies LCA.

Figure A.11: Open view across the Firth of Forth from Dalmeny Estate, layered with the strong presence of woodland along the coastline

Figure A.12: Enclosing nature of the policy woodlands in the context of more open farmland and the landmark feature of Cammo Tower

Landscape Sensitivity Assessment

A.121 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.122 Landform and elevation vary across the LCT, though it is typically low-lying in parts with gentle rises and subtle undulations throughout, and sometimes with more dramatic landform features.

A.123 Where the topography is gently sloping, this often drops towards watercourses, which are a key influence in these landscapes, forming more intimate scale features. At Dreghorn, the landform rises from the incised wooded valley of the Braid Burn; at Lauriston and Dalmeny, the gently undulating landscape rises from the Firth of Forth; and at Craigiehall, Cammo, and the east of Dalmeny, the landform rises from the River Almond.

A.124 Some parts of the Policy Landscapes LCT are more elevated and contribute to a wider landscape setting, including Dundas Hill, Dalmeny Policies, and Craigmillar Castle Park, which forms a prominent landform feature in the south-east of Edinburgh.

A.125 There are occasional more distinctive landform features, including the cliff face within the Dundas Policies which sharply rises above Dundas Loch, and frequent rocky outcrops within the Dalmeny Estate.

Sensitivity

A.126 The landform and scale of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.127 The landcover pattern is complex with a dense distribution of human scale features. The primary characteristic of the LCT is the mature policy woodlands, which appear in the form of tree groups, avenues, and wooded belts. The woodlands are often associated with a traditional, historic estate property, as well as walls, walled gardens, gateways, gatehouses and estate stable or farm buildings. Formal planting or parkland is a common feature closer to properties, with more naturalistic features commonly positioned on the peripheries, including along watercourses.

A.128 Areas of rolling pasture and arable land are typically situated towards the edges of the LCAs, transitioning to the adjacent farmland landscape, with the garden and parkland landscapes with specimen trees being nearer to the properties.

A.129 The LCT has strong boundary features, typically comprising stone walls with perimeter trees. Traditional boundary features result in a sense of enclosure and form additional human scale elements and interest in the landscape.

A.130 There is a strong influence of designed and natural water features, including the River Almond which traverses several Policy Landscape LCAs. Golf courses are common set amidst the parkland and wooded landscape, with mature specimen trees being a feature.

A.131 The majority of built elements are more traditional and comprise estate homes and castles, with formal footpaths, gated entrances, and boundary walls, as well as ornamental features and artworks. The landscape is generally devoid of contemporary influences, though there are occasional more built up areas, including at Mortonhall, Dreghorn, and Craigiehall.

Sensitivity

A.132 The landcover of this landscape is of high sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.133 There are several nationally important Gardens and Designed Landscapes (GDLs) within the LCT including Craigmillar Castle, The Drum, Dalmeny, Craigiehall, Cammo, Dundas Castle, and Newliston, overall occupying the majority of the LCT.

A.134 The GDLs are often associated with Listed estate houses and castles which form a focus in the designed landscape (for example, Craigmillar Castle, Dundas Castle, Lauriston Castle, Newliston House). Some date back to the 14th century, providing a sense of time-depth and a strong sense of history.

A.135 Many of the historic features of these designed landscapes are still present. The original designed landscape of the Dalmahoy Policies LCA has been extensively altered by the golf course and hotel grounds, however surviving historic landscape are present near Addistoun House in the north-east and include the geometric wooded shelterbelts (which are Ancient Woodland).

A.136 Craigmillar Castle and its gardens form a Scheduled Monument which occupies the south-eastern half of the Craigmillar Policies LCA.

A.137 The Morton Mains Conservation Area lies within the LCT, occupying approximately one third of Mortonhall Policies LCA. The combination of an open countryside and wooded policy setting contributes to the character of the Conservation Area.

A.138 Other Conservation Areas in close proximity to the LCT include Cramond and Colinton.

Sensitivity

A.139 The historic character of this landscape is of high sensitivity to wind, solar PV and BESS development.

Visual receptors

A.140 The Craigmillar Policies, Drum Policies, Mortonhall Policies and Dreghorn Policies LCAs in particular have densely settled surroundings. The Lauriston Policies and Cammo Policies LCAs are located amidst relatively settled areas on the edge of Edinburgh. Woodland typically limits or filters views into the LCT from settled areas.

A.141 The majority of the LCT hosts a network of accessible footpaths (including sections of the John Muir Way), cycle paths (including NCN Route 76), tracks and rises that offer a very strong recreational value. In places (e.g. the Newliston Policies LCA, Craigiehall Policies LCA, and parts of the Dundas Policies LCA), more restricted access reduces the number and distribution of visual receptors.

Sensitivity

A.142 The visual receptors of this landscape are of high sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.143 Some historic buildings form landmarks more widely, for example Cammo Tower which is a notable feature in views from the Cammo Fringes LCA and settlement edge, and Craigmillar Castle which is an iconic landmark in south Edinburgh.

A.144 The woodland often results in an enclosed character, filtering outward views, particularly in areas of varied topography. However, extensive outward views are afforded from more elevated areas and reflect intentional sightlines within the designed landscapes. These views contribute to the setting of the houses and parks and form a vital part of the appreciation of the GDLs.

A.145 Key sightlines focus on features such as the Pentland Hills, Arthur's Seat, Corstorphine Hill, the city skyline and the Firth of Forth. Outward views can be panoramic, for example from elevated parts of the Dundas Policies. Other particularly prominent views are afforded from the central rise in the Craigmillar Policies, and from Mons Hill in the Dalmeny Policies, looking towards the Firth of Forth and the Pentland Hills.

A.146 Parts of the landscape away from estate properties and castles are generally more open in visual character, consisting of undulating fields compared to the more dense and ornamental planting features, parkland and gardens around formal houses. LCAs which have larger areas of open fields include the Dundas Policies, Cammo Policies, Craigiehall Policies, Lauriston Policies and Mortonhall Policies LCAs.

A.147 The areas are often viewed as a distinct swathe of woodland from other more elevated areas across Edinburgh, including from Craigmillar Castle (overlooking other LCAs including The Drum), from the Pentland Hills (overlooking Dreghorn Policies), and from South Queensferry (looking towards the wooded setting of Dundas and Dalmeny Policies). This LCT is therefore an important part of the wider landscape fabric of Edinburgh.

Sensitivity

A.148 The visual character of this landscape is of high sensitivity to wind development and medium-high sensitivity to solar PV and BESS development.

Perceptual and scenic qualities

A.149 The combination of policy woodland, designed garden features, open parkland, more naturalistic features and framed distant views contribute to a strong scenic value.

A.150 The policy woodland, perimeter trees, often shallow or sloping landform result in an enclosed character and a sense of seclusion. The sense of enclosure also results in a sense of tranquillity, even in locations near settlements and roads, where built up features are typically well screened.

A.151 Traffic associated with Edinburgh Airport slightly reduces the sense of tranquillity experienced from parts of the LCT.

Sensitivity

A.152 The perceptual and scenic qualities of this landscape are of high sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.153 The Policy Landscape LCT is of high sensitivity to all scales of wind energy development. The reasoning for this is summarised below:

- The complex landscape pattern of densely distributed human scale features, which typically reflect an intentional historic designed landscape, would be adversely altered by the large vertical scale of wind turbines.
- The relative absence of contemporary development, and the resulting traditional undeveloped rural character of the landscape, would be altered by the introduction of wind turbines.
- Views towards monuments, estate houses and castles contribute to a sense of history and a strong visual character, and indicate a higher sensitivity to tall vertical features including wind turbines, which could affect views.
- Distant outward views are also characteristic of parts of this landscape. Views towards the Pentland Hills, Arthur's Seat, the city skyline and Firth of Forth are of higher sensitivity – particularly where they reflect historic designed views and vistas. Wind turbines in closer distance views (within the LCT) would appear larger in scale and detract from the focal skyline features.
- The presence of mature woodlands across much of the LCT, which contribute strongly to visual character, a sense of tranquillity, scenic qualities and historical landscape value, increase the sensitivity to wind turbines. Wind turbines would be out of scale with human scale features such as woodland and detract from its scenic visual quality and naturalness.
- The density of visual receptors and very high levels of recreation associated with the LCT indicates a higher sensitivity to development, as wind turbines would be widely seen by sensitive recreational receptors.

Variations in sensitivity

A.154 There are no variations in sensitivity to wind energy development within the LCT. All areas are considered to be of high sensitivity.

Overall landscape sensitivity to solar PV and BESS developments

A.155 The Policy Landscape LCT is of medium-high sensitivity to small scale solar PV and BESS development and of high sensitivity to medium to large scale solar PV and BESS development. The reasoning for this is summarised below:

- The relative absence of contemporary development, and the resulting traditional rural and undeveloped character of the landscape, would be altered by the introduction of solar PV and BESS development. While existing woodland could potentially provide filtering or screening, the small scale landuse and semi-natural pattern of woodland may be changed by the associated infrastructure required for solar PV and BESS, including access tracks. The small scale irregular character would contrast with the straight edges and typically linear arrangement of solar PV.
- The legibility of the historic origins of these designed landscapes has generally been retained. The reflective materiality of solar PV panels and the solid, modern form and scale of battery storage containers for BESS development would be highly visible, contrasting with the pattern, grain, colour and sense of history within the landscape.
- The elevation of some parts of the landscape, and the undulating open fields, results in some areas of the landscape being highly visible from others (particularly around the LCA edges). Views towards the Pentland Hills, Arthur's Seat, the city skyline and Firth of Forth are of higher sensitivity – particularly where they reflect historic designed views and vistas.
- The density of visual receptors and very high levels of recreation associated with the estates indicates a higher sensitivity to solar PV and BESS development.

Variations in sensitivity

A.156 The areas of Dreghorn Policies and Craigiehall Policies, as existing and former barracks, respectively, are of slightly lower sensitivity to solar PV and BESS development, due to the presence of some utilitarian operational buildings and areas of hardstanding in the landscape which have affected their historic character, their

lower recreational value (given the limited access to these areas) and opportunity for screening presented by existing woodland.

Table A.4: Overall sensitivity scores of the Policy Landscapes LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	Medium-high
Large wind turbines	High
Small solar PV installation	Medium-high
Medium to large solar PV installation	High
Small BESS installation	Medium-high
Medium to large BESS installation	High

Recreational Open Space LCT

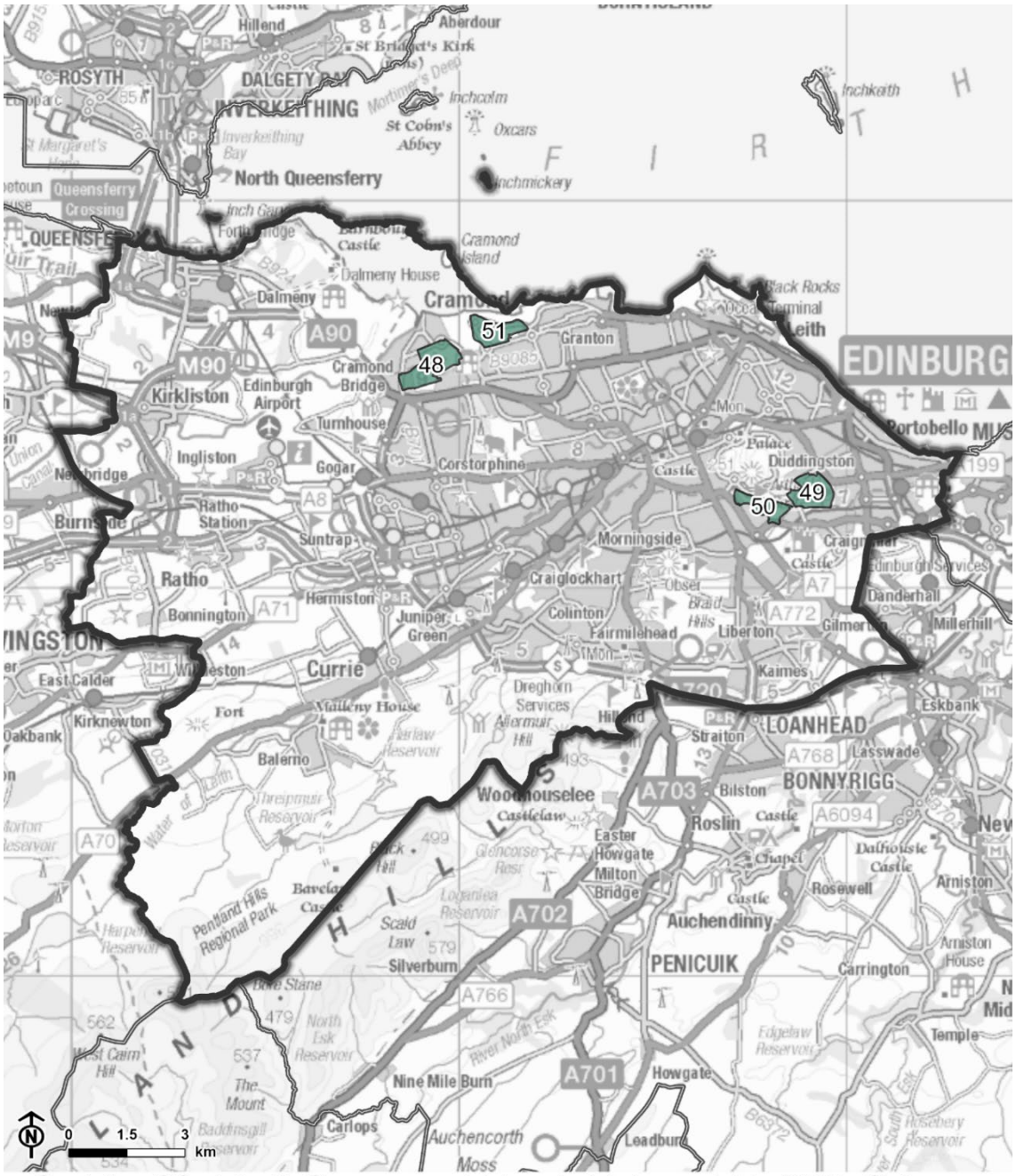
A.157 The Recreational Open Space LCT comprises flat to gently undulating areas that are often influenced by golf courses and are contiguous with other open space in the city, located in the north-west and east.

Landscape character overview

A.158 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Flat to gently undulating landform.*
- *Mature parkland trees with some areas of younger trees.*
- *Often influenced by golf courses with typical bunkers, greens and fairways.*
- *Contiguous with other open spaces within the city.*
- *Typically originating as historic designed landscapes or surrounding buildings and assets of historic significance.*
- *Intervisibility with wider areas is generally limited, although the areas may be visible from distant or elevated locations.*
- *Formal and informal opportunities for recreation, including golf, walking and cycle routes."*

Figure A.13: Contextual map of the Recreational Open Space LCT



City of Edinburgh boundary

Neighbouring Authority boundary

Recreational Open Space

Landscape Character Areas

A.159 The Recreational Open Space LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Barnton Golf Courses (48)
- Prestonfield Golf Course (49)
- Silverknowes Golf Course (50)
- Duddingston Golf Course (51)

Designated landscapes

A.160 The north-east of the LCT is within the Holyrood, Duddingston and Prestonfield LLA. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- *"The mature policies of Prestonfield Golf Course and Duddingston House (both of which are GDLs)"* which incorporate *"perimeter woodlands and parkland trees… provide settings to Listed buildings and their associated golf courses"*;
- *"In combination with Holyrood Park, the low-lying land at Duddingston and Prestonfield, and the grounds of Peffermill House, form part of a significant open swathe of grassland and woodland within the built environment. This extends south-eastwards towards Craigmillar Castle, Little France Park and Midlothian beyond"*; and
- *"Access to the policy landscape around Duddingston and Prestonfield is more limited by their golf use, however the John Muir Way and National Cycle Network Route 1 pass between these areas of landscape in the south of the LLA"*.

Existing renewables development

A.161 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT.

A.162 Wind farms in Fife are visible in views across the Firth of Forth from the Silverknowes Golf Course, including Mossmorran (2 turbines, 100m blade tip height), Kirkton Farm, Fife (1 turbine, 67m blade tip height), Goathill Quarry (1 turbine, 100m blade tip height), and Little Raith (9 turbines, 126m blade tip height).

Figure A.14: Trees and woodland partially screen distant views over the Firth of Forth and contribute to a sense of enclosure within the Silverknows Golf Course LCA

Figure A.15: The distant profile of Arthur's Seat forms the backdrop and creates a sense of enclosure in the Prestonfield Golf Course LCA, with its distinctive historic ridge-and-furrow field pattern

Landscape Sensitivity Assessment

A.163 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.164 Broadly, landform is relatively flat with some gently undulating hills in the east. In the north-west, the landform gently slopes north towards the firth. The undulating hills create hollows and pockets of enclosure within the landscape. However, at elevated, flatter points particularly in the north-west, the landscape has a more open character that allows for long distance views of the firth.

A.165 In the east, the LCT has an important relationship with the rising landform of Arthur's Seat, although the hill summit results in a sense of enclosure to the north.

A.166 Surviving ridge-and-furrow field patterns create sensitive localised undulations in the east (within the Prestonfield Golf Course LCA).

Sensitivity

A.167 The landform and scale of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.168 Landcover is influenced by golf courses with bunkers, greens and fairways. There is an intricate pattern of woodland throughout the landscape, with mature parkland trees and some areas of younger trees creating a dense distribution of human-scale features.

A.169 Settlement is very limited within the LCT, though some buildings – which often have historic associations – contribute human-scale references in the landscape.

Sensitivity

A.170 The landcover of this landscape is of high sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.171 The origins of this landscape are typically associated with historic designed landscapes surrounding buildings or assets of historic significance, contributing to a localised experience of historic character. However, due to woodland screening and the sloping landform, the historic character of the LCAs to the west have limited influence on the perception of the wider surrounding area.

A.172 In the west, there are three Listed buildings associated with the Royal Burgess Golf Course, which add to the character of the local area through their use of red sandstone. An additional two Listed buildings associated with the Silverknowes Golf Course also add to a sense of time depth through their connection to the nearby Listed Muirhouse.

A.173 The Barnton Golf Course is directly adjacent to the Barnton Conservation Area. Views overlooking the golf course towards the Firth of Forth, where available, contribute to the context of the Conservation Area.

A.174 Due to high visibility from vantage points in Holyrood Park, the LCAs in the east (the Duddingston Golf Course and Prestonfield Golf Course LCAs) contribute to the wider historic character in the area. Prestonfield Golf Course and Duddingston Golf Course sit within the Garden and Design Landscapes of Prestonfield House and Duddingston House, respectively. Both GDLs are associated with Listed buildings, including the 18th century Prestonfield House Hotel and the 18th century Duddingston House, and their surrounding formal gardens and woodland or parkland. The Prestonfield Golf Course is also recognised for its medieval ridge-and-furrow field system, which is still visible in the landform. The historic nature of these areas contributes to the special qualities of the Holyrood, Duddingston and Prestonfield LLA.

A.175 The Duddingston Golf Course LCA forms part of the Duddingston Conservation Area, and the rural appearance and green setting of the golf course contributes to the historic Duddingston House.

Sensitivity

A.176 The historic character of this landscape is of high sensitivity to wind development, and medium-high sensitivity to solar PV and BESS development.

Visual receptors

A.177 Recreational opportunity in the landscape primarily stems from golf courses, with five golf courses found throughout it. Playing fields in the east provide further recreational opportunities.

A.178 There are limited paths within the LCT. In the west, the Queensferry to Craigleith Core Path crosses the Silverknowes Golf Course LCA to connect the surrounding urban area with Cramond Coast. The John Muir Way and National Cycle Network Route (NCN 1) cuts between the Royal Burgess Golf Course and Bruntsfield Golf Course, though fencing on either side prevents access to the golf courses.

A.179 In the east, the John Muir Way and National Cycle Network Route (NCN 1) pass along the southern boundary of the Duddingston Golf Course LCA and northern boundary of the Prestonfield Golf Course LCA, but outward views from this part of the routes are screened by woodland, stone walls and fencing. The Duddingston Golf Course and Prestonfield Golf Course LCAs are highly visible from hills and recreational routes within Holyrood Park.

A.180 The LCT borders urban areas, including Cramond, Clermiston and West Pilton in the west, and Bingham, Niddrie and Newington in the east. There is limited visibility from the surrounding area into the LCT due to its wooded nature, with the exception of views from some properties adjacent to golf courses like those in the Barnton Conservation Area and apartment blocks looking over Silverknowes Golf Course.

Sensitivity

A.181 The visual receptors of this landscape are of medium-high sensitivity to wind development, and sensitivity to solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.182 Woodland and parkland trees create a sense of enclosure within the landscape and screen views towards more developed areas.

A.183 From Silverknowes Golf Course, there is some intervisibility with surrounding apartment blocks, resulting in a more developed skyline.

A.184 In the north-west, glimpsed longer distance views across the Firth of Forth are experienced from slightly elevated parts of the landscape and contribute to a sense of place.

A.185 The LCT is contiguous with other open spaces in Edinburgh. In the east, the Prestonfield Golf Course and Duddingston Golf Course LCAs have an important visual relationship with Arthur's Seat, forming the swathe of open space at its base that is highly visible from elevated summits. Arthur's Seat also forms the backdrop of the LCAs, contributing to their identity.

Sensitivity

A.186 The visual character of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Perceptual and scenic qualities

A.187 In the east, the Duddingston Golf Course and Prestonfield Golf Course LCAs form the setting of the Holyrood, Duddingston and Prestonfield LLA and contribute to the scenic qualities of Holyrood Park. They are of particular importance to iconic, panoramic views from Arthur's Seat.

A.188 There is a strong contrast between the wooded, enclosed landscape and the surrounding settlements. The lack of development and enclosing woodland, which screens views to the surrounding urban area, create a sense of tranquillity despite the proximity to urban areas. Despite limited development, the highly maintained nature of the golf courses reduces the sense of naturalness.

A.189 In the east of the Silverknowes Golf Course, a caravan park and covered football fields give the area a more modern and developed perception.

Sensitivity

A.190 The perceptual and scenic qualities of this landscape are of medium-high sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.191 The Recreational Open Space LCT is of high sensitivity to all scales of wind energy development. The reasoning for this is summarised below:

- Woodland, historic buildings and gently undulating landform contribute to a small scale landscape, which would be dominated by any scale of wind energy development.

- In the east, the LCT is highly intervisible from popular viewpoints, including Arthur's Seat and other routes in Holyrood Park. Wind energy development would be highly visible and would impact the experience of surrounding viewpoints.
- The historic nature of the LCT, with its ties to designed landscapes, the distinctive raised topography of the ridge-and-furrow pattern, and historic buildings, increases sensitivity. Modern development would reduce the valued historic character of this LCT.
- The landcover of the Recreational Open Space LCT is influenced by use of the landscape for golf courses, having an intricate pattern of amenity grass and woodland. The complex pattern of woodland throughout the LCT provides scenic and ecological value. The connectivity of the woodland would be disrupted by the creation wind energy development and ancillary infrastructure.
- The recreational value provided by golf courses would be disrupted by the presence of wind turbines and associated ancillary infrastructure, including access tracks. While views into the landscape are limited by woodland screening, particularly from the surrounding urban area, wind turbines would appear above the wooded skyline.
- The scenic nature of the LCT is emphasised by its high contrast to the surrounding urban area. While the LCT is highly managed, wind turbines and their ancillary infrastructure would significantly reduce this contrast by increasing the influence of large-scale modern development into the landscape, reducing the overall scenic value.
- The LCT plays a significant role in the setting of Holyrood Park and the Cramond Coast, which increases sensitivity to wind energy development as it would be visible from popular footpaths and views in these areas.
- In the west (within the Silverknowes Golf Course and Barnton Golf Courses LCAs), the north-facing, sloping landform would result in relatively high visibility of turbines in views from the coastline and across the firth.

Variations in sensitivity

A.192 In the east, the value of the Duddingston Golf Course and Prestonfield Golf Course LCAs as part of the Holyrood Park GDL and Holyrood, Duddingston and Prestonfield LLA reflects the importance of this landscape and its highly visible nature from popular viewpoints and recreational routes. Any wind development would be highly visible in these valued views. As a result, sensitivity to all scales of wind development is highest in these LCAs.

A.193 The surviving ridge-and-furrow field pattern in the Prestonfield Golf Course LCA is very sensitive to change.

Overall landscape sensitivity to solar PV and BESS developments

A.194 The Recreational Open Space LCT is of medium-high sensitivity to small scales of solar PV and BESS development and high sensitivity to medium to large scales of solar PV and BESS development. The reasoning for this is summarised below:

- The undulating landscape has a small scale resulting from the striking pattern of historic ridge-and-furrow in places, as well as woodland and historic buildings in others. BESS developments would conflict with the small scale of the landscape.
- There is limited development within the LCT, which increases sensitivity to the modern appearance of solar PV and BESS.
- While existing woodland could potentially provide screening, the irregular pattern of woodland may be changed by the associated infrastructure required for solar PV and BESS, including access tracks. The irregular pattern would contrast with the regular edges and typically linear arrangement of solar PV.
- Whilst use of the landscape for golf has changed the landscape pattern in places, the legibility of the historic origins of these areas has generally been retained. The reflective materiality of solar PV panels and the solid form and scale of battery storage containers for BESS development would be highly visible, contrasting with the pattern and sense of history within the landscape.
- The visible nature of solar PV and BESS would also negatively impact the role the Prestonfield Golf Course and Duddingston Golf Course LCAs play in creating a wider green swathe that extends south and east from Holyrood Park, detracting from the transition of natural to urban, including in highly valued views experienced by recreational receptors within Holyrood Park.
- The recreational value provided by the golf courses, playing fields and paths would be adversely affected by solar PV and BESS development. There is very limited space within the LCT that is not actively used for recreation. As a result, even small-scale development – with associated infrastructure such as access tracks and security fencing – would have a negative influence on the recreational experience of the landscape. The noise from BESS would also affect the tranquil nature of this LCT.

Variations in sensitivity

A.195 Due to their association with the Holyrood Park GDL and Holyrood, Duddingston and Prestonfield LLA, the Prestonfield and Duddingston Golf Course LCAs are of higher sensitivity to solar PV and BESS development. The reflective nature of solar panels would result in development being highly visible in panoramic views from Holyrood Park. The access requirements for BESS would also alter the perception of the areas being undeveloped areas of landscape, as seen in views.

A.196 The surviving ridge-and-furrow field pattern in the Prestonfield Golf Course LCA is very sensitive to change.

A.197 The east of the Silverknowes Golf Course LCA is potentially less sensitive to small solar PV and BESS development, as a caravan park and indoor football fields contribute to a more modern character and woodland belts provide screening opportunities.

Table A.5: Overall sensitivity scores of the Recreational Open Space LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	High
Large wind turbines	High
Small solar PV installation	Medium-high
Medium to large solar PV installation	High
Small BESS installation	Medium-high
Medium to large BESS installation	High

Rolling Farmland LCT

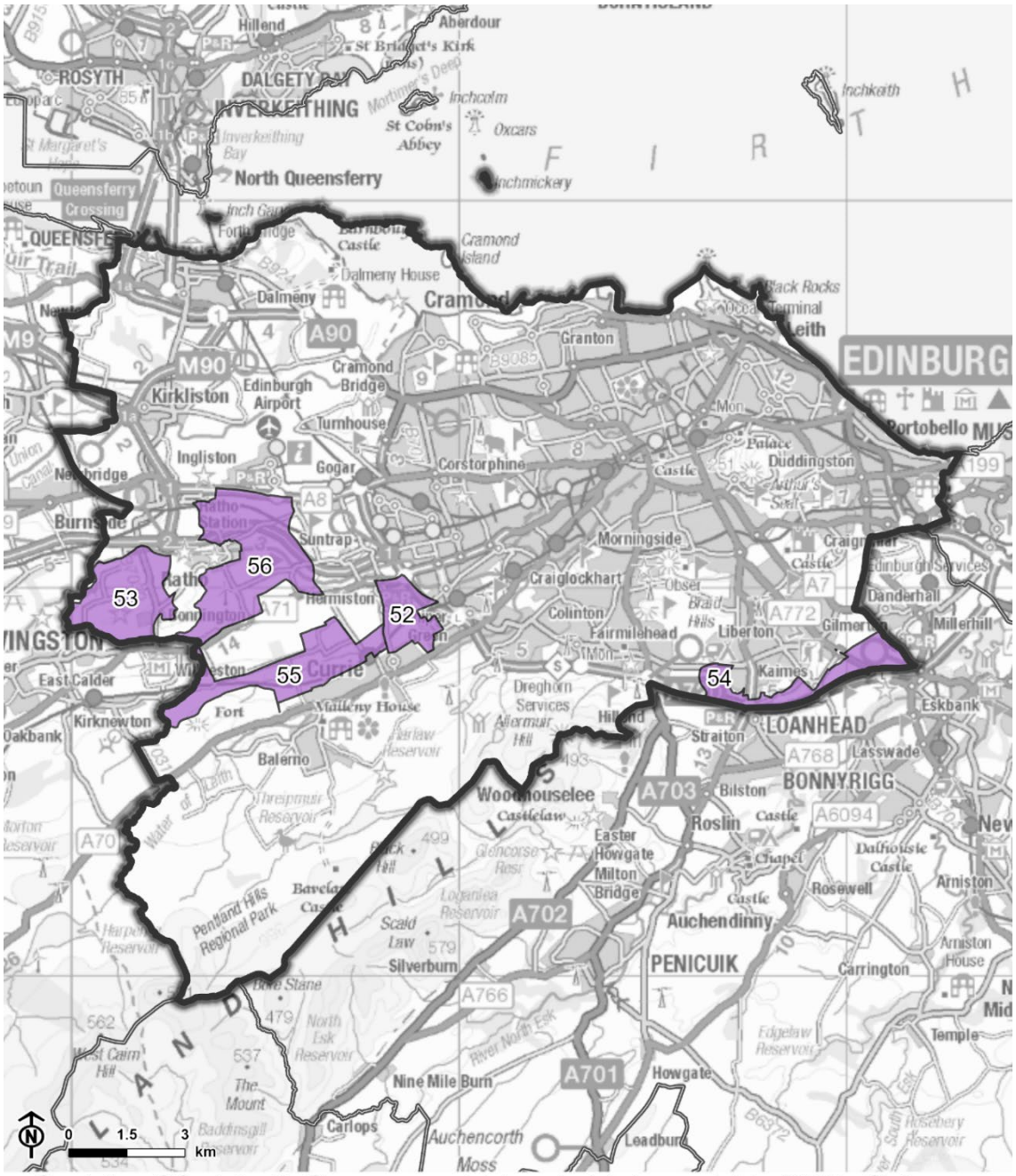
A.198 The Rolling Farmland LCT is part of a wider area of gently undulating, predominantly arable land in the west of Edinburgh, which extends into West Lothian. The LSA focuses on the elements of the LCT which are within the City of Edinburgh local authority area.

Landscape character overview

A.199 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Gently undulating slopes and low hills.*
- *Land use is mainly arable farming.*
- *Small areas of woodland, including remnants of policy woodland, although generally not heavily wooded.*
- *Close to major transport routes, industrial development and settlement, which impinge on perceptions of rural character in many places.*
- *Forming part of the wider rural surroundings in panoramic views from nearby hills including views towards settled areas."*

Figure A.16: Contextual map of the Rolling Farmland LCT



City of Edinburgh boundary
Neighbouring Authority boundary
Rolling Farmland

Landscape Character Areas

A.200 The Rolling Farmland LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Baberton Farmland (52)
- Bonnington Farmland (53)
- Burdiehouse Farmland (54)
- Gowanhill Farmland (55)
- Ratho Farmland (56)

Designated landscapes

A.201 In the west, the LCT overlaps with parts of three LLAs: Gogar LLA, Ratho Hills LLA and Upper Almond LLA. The special qualities of the areas covered by the Gogar LLA and Upper Almond LLA are not considered relevant to the small areas that extend into the Rolling Farmland LCT. The Ratho Hills LLA, however, covers a larger area in the west of the LCA. The reasons for designation for the Ratho Hills LLA (LUC, 2026) of relevance to the LCT are as follows:

- *"The wooded corridor of the Union Canal, and remnant parkland on the slopes in the north of the area near Ratho Hall and former Craigpark House, provide a wooded backdrop and enclosure to Ratho village (including its Conservation Area). To the south of the village, a ridgeline rises above well-managed farmland"*;
- *"An intermittent shelterbelt of trees snakes along the ridgeline and accentuates its shape, providing a distinctive local landmark. The southern slopes of the ridge are laid out with woodland blocks and form part of the setting to the Hatton House GDL"*;
- *"Despite the nearby presence of the M8, the Lost Shore Surf Resort and quarrying activity to the west of the area, the combination of landform and land cover is of local scenic value and contributes to Ratho's identity and relatively tranquil setting"*;
- *"Ratho is a popular mooring point for boaters on the Union Canal which skirts the northern edge of the village, and the towpath is well used by walkers and cyclists. The Canal towpath connects to local paths serving the Edinburgh International Climbing Area. Informal paths at Tormain Hill offer further opportunity to experience the landscape"*; and

- *"The ridge-top path running southwards from Ratho to Tormain Hill offers extensive, elevated views across a foreground of farmland and woodland towards Arthur's Seat and the city's skyline in the east, the Firth of Forth, Fife, the Cleish Hills and Ochils to the north, the River Almond valley to the west and the Pentland Hills in the south. Tormain Hill is also the site of Cup and Ring marked rocks (a Scheduled Monument)"*.

Existing renewables development

A.202 There are no operational or under construction commercial-scale wind farms, solar PV or BESS developments in the LCT. There is one domestic-scale turbine in Ratho, which is visible throughout the Ratho Farmland LCA.

A.203 Due to the low-lying nature of the Rolling Farmland LCT, there is no significant intervisibility with existing wind farms located beyond the local authority boundary.

Figure A.17: The rolling landscape creates pockets of enclosure within long distance views towards the Pentland Hills from Ratho

Figure A.18: The west of the Gowanhill Farmland LCA is impacted by existing pylons and rail line infrastructure, with Kaimes Hill creating a strong sense of enclosure

Landscape Sensitivity Assessment

A.204 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.205 Gently undulating slopes of a medium to large scale with smaller-scale low, rolling hills, punctuated by gentle dipped valleys ranging from 75m AOD to 140m AOD and some distinct ridges including between Burdiehouse Burn and Gilmerton.

A.206 Ridges, hills and slopes have an open character owing to their relative elevation.

Sensitivity

A.207 The landform and scale of this landscape is of medium-high sensitivity to wind and medium sensitivity to solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.208 Landcover is relatively simple, predominantly defined by arable land with some small areas of woodland and remnant policies.

A.209 Field patterns are varied in scale. Fields are typically bounded by stone walls, post and wire fences, and hedges, reinforcing a relatively open character, particularly from high points within the hills.

A.210 Intermittent pockets of woodland and woodland belts create a localised sense of enclosure and provide ready-scale references.

A.211 Urban influences within the LCT are limited, although the larger settlements of Ratho and Balerno border the LCT in the west and have intervisibility with the Ratho Farmland and Gowanhill Farmland LCAs respectively. In the east, the settlements of Burdiehouse and Gilmerton border the Burdiehouse Farmland LCA and also exert an urbanising influence on parts of the landscape.

A.212 The Currie and Kaimes Substations are found at the southern edge of the LCT, giving the perception of being more industrialised.

Sensitivity

A.213 The landcover of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.214 The historic character of the area is typically localised to estate properties, many of which are Listed buildings, and their surrounding policies. However, many of these properties are screened by woodland and there is not a significant sense of time depth in the area more widely.

A.215 The Hatton House GDL, with four associated Listed buildings, is notable for the contributions its policy woodlands, shelterbelts, walls and entrance gateways make to local character. Intentional views towards Arthur's Seat are available from the main drive and are important to the character of the GDL.

A.216 Additional Listed buildings are associated with the Ratho Park Golf Club, Baberton Golf Course, Ashley House, and the Baberton Mains Cottages.

A.217 There is a stronger sense of time depth near Ratho where the pattern of 18th and 19th century rectilinear fields is still prominent.

Sensitivity

A.218 The historic character of this landscape is of low-medium sensitivity to wind development, and low-medium sensitivity to solar PV and BESS development.

Visual receptors

A.219 Recreation is a key reason for this landscape's inclusion in the Ratho Hills LLA. Ratho is a popular mooring point for boaters along the Union Canal and recreational value is provided by this section of the canal for walkers and cyclists. Golf courses also offer opportunity to experience the landscape.

A.220 Jupiter Artland, an outdoor sculpture park situated in the grounds of Bonnington House in the west of the LCT (within the Bonnington Farmland LCA), provides cultural and recreational interest.

A.221 The settlements of Balerno, Baberton, Ratho and Calder (in West Lothian) border the LCT, with residential properties having long distance views over the open

landform. Views are also available from the urban edge of Edinburgh overlooking the Burdiehouse Farmland LCA in the east of the LCT.

Sensitivity

A.222 The visual receptors of this landscape are of medium sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.223 Due to its open character, the landscape is visually prominent within the wider landscape and forms part of the wider rural context in panoramic views from nearby hills, including Kaimes Hill, Ratho Hills, and the Pentland Hills.

A.224 Skylines are influenced by linear and electricity infrastructure, including substations, high voltage transmission lines and a railway line, particularly in the east of the landscape.

A.225 Long distance views are common within the landscape, with views to the Firth of Forth, Arthur's Seat and the Pentland Hills found from elevated, open roads which pass throughout the landscape.

Sensitivity

A.226 The visual character of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Perceptual and scenic qualities

A.227 The rolling nature of the landform results in some areas of enclosure which have a scenic and tranquil character. The sense of tranquillity found within the Ratho Farmland LCA is recognised as a special quality of the Ratho Hills LLA.

A.228 More open areas of the landscape are influenced by noise from major roads, including the A71 and City Bypass, and the presence of development on the skyline, such as pylons. With the presence of substations, parts of this landscape (particularly the Gowanhill Farmland LCA and Burdiehouse Farmland LCA) give rise to the perception of being more developed.

A.229 Frequent, long-distance views towards the Firth of Forth, Arthur's Seat, Edinburgh and the Pentland Hills contribute to scenic value.

Sensitivity

A.230 The perceptual and scenic qualities of this landscape are of medium sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.231 The Rolling Farmland LCT is of medium-high sensitivity to small/medium turbines and high sensitivity to large wind turbines. The reasoning for this is summarised below:

- The rolling landform of the landscape is punctuated by low hills and ready-scale references of field trees, woodland and small farm buildings, which give the impression of a human-scale landscape. Wind turbines would be likely to dominate in the landscape, given its low-lying nature and scale.
- The Rolling Farmland LCT has allows notable intervisibility with the surrounding landscape given its open character, particularly from local hills where it contributes to a wider rural surrounding. The area is also highly intervisible with settlements including Balerno, Baberton, Ratho and Calder (in West Lothian) and the urban edge of Edinburgh in the east. Wind turbines and associated infrastructure would result in a more developed landscape and changes to views.
- Long distance views, particularly those looking towards the Firth of Forth, Arthur's Seat and the Pentland Hills, contribute a scenic quality to the landscape. Wind turbines would be highly visible in these views and would detract from them. However, this effect could be reduced where small wind turbines could be partially screened in hollows and where there is existing influence by infrastructure.
- Golf courses, the Union Canal and the outdoor sculpture park at Jupiter Artland contribute to cultural and recreational interest. Wind energy development would have reduced effects where turbines and associated infrastructure do not affect recreational access, or the amenity of views experienced by those visiting these areas.

Variations in sensitivity

A.232 Areas of local historic value, including remnant policy landscapes surrounding Listed buildings and the Hatton House GDL, are more sensitive to wind energy development.

A.233 Existing development, including electricity transmission towers and infrastructure associated with the railway, affects the skyline in the west, near Kaimes Hill. Alongside existing development, wind turbines would intensify areas of development, resulting in cumulative effects with these other forms of infrastructure, which would require careful consideration.

Overall landscape sensitivity to solar PV and BESS developments

A.234 The Rolling Farmland LCT is of medium sensitivity to small scales of solar PV and BESS development and high sensitivity to medium-large scales. The reasoning for this is summarised below:

- The gently rolling landform of the landscape creates alternating areas of high visibility and areas of enclosure within the landscape. Small scale solar PV and BESS development would be least disruptive where the landform could play a role in screening. However, particularly with BESS, associated infrastructure such as access roads and landform modifications for hardstanding platforms may be highly visible in the open landscape.
- The visibility of the landscape from surrounding hills, and its role in contributing to the wider rural context, increases sensitivity to solar PV and BESS. The reflective nature of PV panels would increase its visibility and contrast with existing land use.
- The proximity of major roads and urbanised areas influences the sense of tranquillity and the perception of an undeveloped landscape.
- Golf courses, the Union Canal and the outdoor sculpture park at Jupiter Artland contribute to cultural and recreational interest. Solar PV and BESS development would be less disruptive where associated infrastructure would not affect recreational access or the amenity of views experienced by those visiting these areas.

Variations in sensitivity

A.235 Historic field boundaries in the Ratho Farmland LCA would be particularly sensitive to the creation of solar PV and BESS. While the pattern of the landscape is linear, potential for damage to the historic field pattern and its stone boundaries would strongly alter the character of the landscape.

A.236 The Barberton Farmland LCA has a more developed character, resulting from existing transportation and electricity transmission infrastructure. The industrial appearance of BESS and the reflective nature of solar PV would be potentially less

disruptive due to the existing perception of development in the landscape. Cumulative effects resulting from the introduction of new medium-large solar PV or BESS development will require consideration.

A.237 Localised areas with stronger historic character, such as remnant policy landscapes surrounding Listed buildings, are of higher sensitivity to solar PV and BESS which would alter the traditional historic character of these areas.

Table A.6: Overall sensitivity scores of the Rolling Farmland LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	Medium-high
Large wind turbines	High
Small solar PV installation	Medium
Medium to large solar PV installation	High
Small BESS installation	Medium
Medium to large BESS installation	High

Rural Outcrop Hills LCT

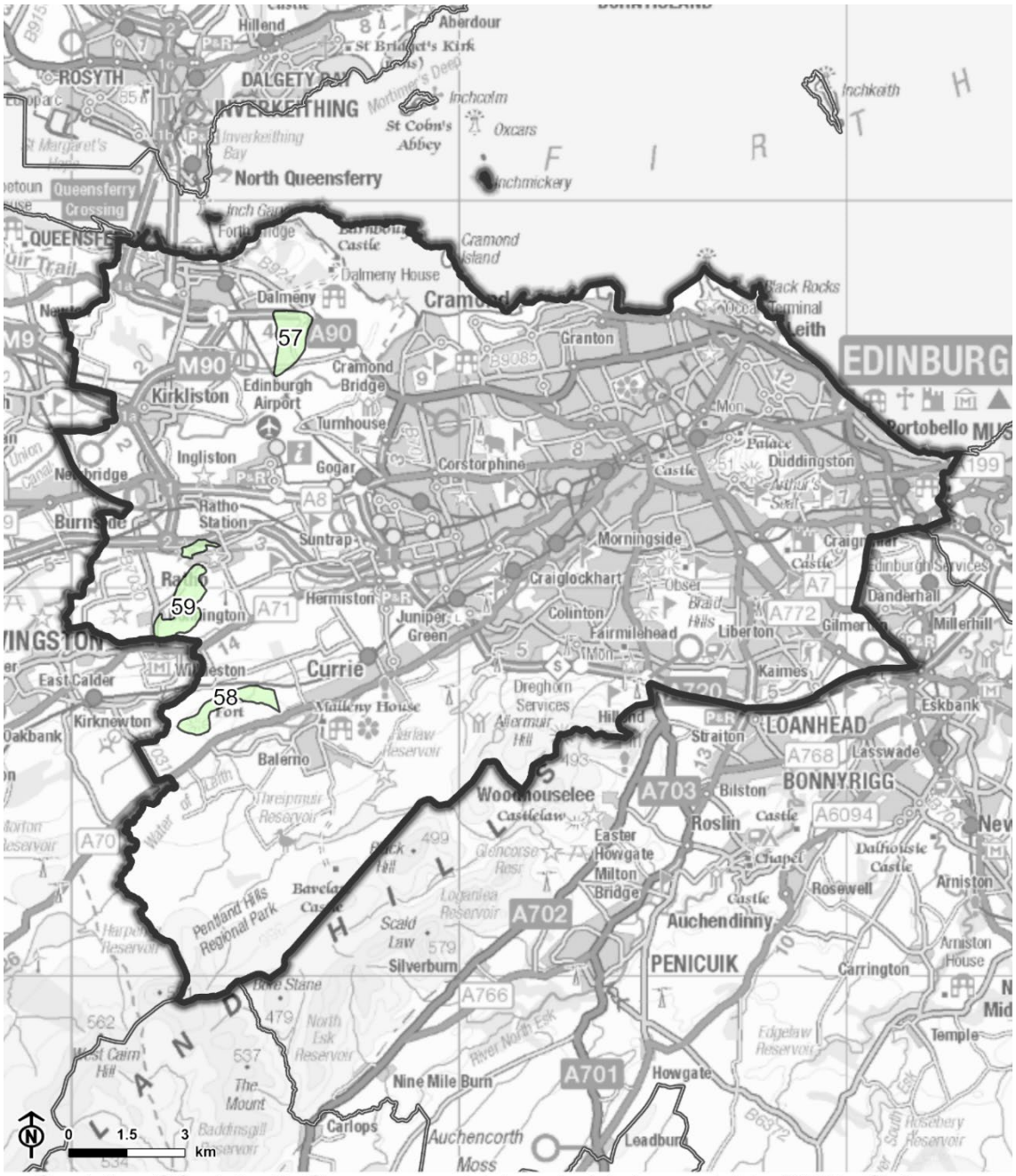
A.238 The Rural Outcrop Hills LCT encompasses three isolated groups of relatively small yet rugged hills in the west of Edinburgh that rise above the surrounding farmland.

Landscape character overview

A.239 The key characteristics of the LCT are described as follows (LUC, 2026):

- *"Elongated hills volcanic in origin rising above the surrounding landscape.*
- *Ridges and hill summits often punctuated by woodland.*
- *Some outcropping of rock and quarrying is a common feature.*
- *The hills are locally important for recreational use and provide opportunity to experience extensive views across the surrounding landscape."*

Figure A.19: Contextual map of the Rural Outcrop Hills LCT



City of Edinburgh boundary

Neighbouring Authority boundary

Rural Outcrop Hills

Landscape Character Areas

A.240 The Rural Outcrop Hills LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Craigie Hill (57)
- Kaimes Hill (58)
- Ratho Hills (59)

Designated landscapes

A.241 The LCT includes two LLAs: Craigie Hill LLA and Ratho Hills LLA. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- Craigie Hill LLA:
  - A *"locally distinctive landmark"* which *"stands proud of gently undulating, open fields within the Lower Almond Farmland"*;
  - *"Its wooded crest merges with and reinforces the parkland setting to the Dalmeny Estate to the north-east and woodland within the River Almond valley to the south"*;
  - *"the hill provides a viewpoint with glimpsed views overlooking wide vistas of the Dalmeny Estate and Firth of Forth to the north, and across the River Almond valley and towards the Pentland Hills to the south"*; and
  - *"More open views can be experienced from the fields around the base of the hill"*.
- Ratho Hills LLA:
  - *"The wooded corridor of the Union Canal, and remnant parkland on the slopes in the north of the area near Ratho Hall and Craig Park, provide a wooded backdrop and enclosure to Ratho village"*;
  - *"An intermittent shelterbelt of trees snakes along the ridgeline and accentuates its shape, providing a distinctive local landmark"*;
  - *"the combination of landform and land cover is of local scenic value and contributes to Ratho's identity and relatively tranquil setting"*; and
  - *"The ridge-top path running southwards from Ratho to Tormain Hill offers extensive, elevated views across a foreground of farmland and woodland towards Arthur's Seat and the city's skyline in the east, the Firth of Forth,*

Fife, the Cleish Hills and Ochils to the north, the River Almond valley to the west and the Pentland Hills in the south".

Existing renewables development

A.242 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT.

A.243 One domestic scale turbine to the south of Ratho (located within the Ratho Farmland LCA) is visible in open views from the slopes of the Ratho Hills LCA.

A.244 Due to the prominence and elevation, views of more distant wind farms (in other local authority areas) are available from the local summits within the LCT, however turbines appear as distant, barely perceptible features.

Figure A.20: The distinctive wooded ridge of Craigie Hill viewed across Almond Farmland and farmland within the Craigie Hill LLA

Figure A.21: Extensive outward views afforded from Ratho Hills, looking towards the Pentland Hills and the city skyline

Landscape Sensitivity Assessment

A.245 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.246 Landform comprises distinctive elongated hills, volcanic in origin. Whilst the hills are relatively modest in height (indicating a smaller scale), their rugged character, complexity of topography and sense of contrast with the surrounding lowland landscape results in the perception of the hills being larger than they are. The distinctive profiles of Craigie Hill and the Ratho Hills form part of their reason for designation as Local Landscape Areas. Slopes are steep in places, particularly at Kaimes Hill.

A.247 Past quarrying has significantly influenced the landform, including at Craigie Hill where a large former quarry on the ridge forms a jagged notch seen against the skyline (though partially screened by woodland); at Kaimes Hill where past quarrying has created an angular rocky edge and the adjacent active Ravelrig Quarry is a key feature; and adjacent to Ratho Hills (on the base of the northern hill), the disused quarry which now forms part of the Edinburgh International Climbing Arena.

A.248 At the summits, there is a strong sense of openness, particularly from Ratho Hills and Kaimes Hill.

Sensitivity

A.249 The landform and scale of this landscape is of high sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.250 Whilst current and past quarrying influence the land cover in parts of the LCT, parts of the landscape retain a semi-natural character.

A.251 Ridges and hill summits are often punctuated by woodland, including mature trees such as beech and sycamore. Craigie Hill is the most wooded of the hills, with the trees providing a strong sense of enclosure. The quarry area atop the hill is slightly more open in character due to being less wooded.

A.252 The north of the Ratho Hills is more densely wooded with shelterbelt, field boundaries and woodland along the Union Canal. The non wooded parts of the hills comprise arable farmland and grassland with narrow, well-managed shelterbelts that snake southwards over the softly undulating ridge.

A.253 Kaimes Hill is less wooded, though an area of denser woodland is present in the east. The reclaimed tip area of Kaimes Hill is used for grazing. Landcover on Dalmahoy Hill is characterised by scrub, including gorse, bracken and rough grass.

A.254 Other land uses include West Craigie Farm in the north which includes buildings and polytunnels, surrounded by agricultural fields.

Sensitivity

A.255 The landcover of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.256 An Iron Age fort in the south of Craigie Hill contributes to the sense of history in the landscape locally, although woodland obscures the legibility of this feature more widely. Kaimes Hill and Dalmahoy Hill are crowned with Iron Age hillforts (Scheduled Monuments), which contribute to a sense of history, although quarrying has altered one. Ancient cup and ring marked stones near the summit of Tormain Hill (within the Ratho Hills) contribute to a sense of history locally.

A.257 Hatton House GDL is located partially in the south of Ratho Hills, although the GDL is mainly focused around Hatton House (in the Rolling Farmland LCT). Craigie Hill has an important relationship with the Dalmeny GDL, as woodland on Craigie Hill coalesces with the policy woodland within the GDL.

Sensitivity

A.258 The historic character of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Visual receptors

A.259 Whilst settlement within the LCT is limited, there are several settlements in the vicinity of the LCT, including Ratho and Dalmeny.

A.260 Craigie Hill forms a focus in views from surrounding main roads when travelling between settlements, and is seen as a backdrop in views from Queensferry, and the Edinburgh-Glasgow railway line.

A.261 Informal footpaths traverse the hills and lead to the summits, with the hills being a popular focus for walkers, taking advantage of the panoramic views available from their tops.

A.262 The Union Canal Towpath passes through the LCT in Ratho, providing further recreational opportunity.

Sensitivity

A.263 The visual receptors in and around this landscape are of medium sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.264 Extensive views across the surrounding landscape can be experienced by recreational receptors accessing the hills, particularly from Kaimes Hill and Dalmahoy Hill in the south, and parts of the Ratho Hills. Views focus on Arthur's Seat, the city skyline, the Firth of Forth and the Pentland Hills. Views available from these hills form part of their reason for designation as Local Landscape Areas.

A.265 Open views can be experienced from the farmland of Craigie Hill, also focusing across the Dalmeny Estate, though views from the hill are more enclosed by woodland.

A.266 The hills are highly visible from the surrounding farmland. Although Craigie Hill and the Ratho Hills are lower than Kaimes Hill, their surrounding low-lying farmland and the openness of adjacent fields leads to them being prominent features in local views.

A.267 The Ratho Hills form an important background to views from the settlement of Ratho. The distinctive profile of Craigie Hill forms a landmark, lying between the dense urban edge of north-west Edinburgh and smaller settlements to the north-west and west.

Sensitivity

A.268 The visual character of this landscape is of medium-high sensitivity to wind, solar PV and BESS development.

Perceptual and scenic qualities

A.269 The elevated and wooded character of Craigie Hill forms an extension of the rolling landform of the Dalmeny Estate, contributing to scenic quality more widely, with its reinforcement of the parkland setting of Dalmeny relating to its reasons for LLA designation.

A.270 Kaimes Hill and Dalmahoy Hill are prominent in views from the surrounding landscape. The jagged and modified outline of Kaimes Hill is particularly distinctive. The wild, craggy character of the hilltops, despite being modified, contrasts with the more built up character of the surrounding landscape, which is influenced by transmission lines, roads and railways.

A.271 Despite the proximity of Ratho village and nearby roads, a sense of seclusion and tranquillity can be experienced in this area, especially at the wooded hill summits in the south. A sense of tranquillity forms part of the reason for designation of the Ratho Hills as a Local Landscape Area.

A.272 From Kaimes Hill in the south of the LCT, woodland in the east provides contrast in landscape pattern and textures, particularly compared to the more rugged character of hill tops and the open character of surrounding farmland, which provides scenic interest.

Sensitivity

A.273 The perceptual and scenic qualities of this landscape are of medium-high sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.274 The Rural Outcrop Hills LCT is of medium-high sensitivity to small to medium scale wind energy development and high sensitivity to large scale wind energy development. The reasoning for this is summarised below:

- The relative elevation of this LCT and its prominence increases the sensitivity as there are high levels of intervisibility, and the hills form distinctive skyline features. Tall features such as turbines situated on hill tops would be visually prominent across the wider landscape, affect the perception of scale and impede on the appreciation of rugged topography of these local landmarks.
- The woodland contributes to a perceived sense of naturalness, particularly contrasting with surrounding areas of developed landscape. This perception

would be altered by the introduction wind turbines, which could require felling and modification to landform.

- The availability of distant outward views, including across the Firth of Forth, towards the Pentland Hills, and the city skyline, together with widespread views towards these hills, indicates an increased sensitivity to tall vertical features. They would form large new focal features across the rugged and relatively small scale skylines of the hills, affecting the sense of scale.

Variations in sensitivity

A.275 The woodland associated with Craigie Hill is of particular importance to the wider landscape fabric, as it is seen to connect with the wooded hills of the Dalmeny GDL. Introducing wind farms to Craigie Hill would alter this relationship, and affect the sense of place more widely. As such, in this sense Craigie Hill is of higher sensitivity than other parts of the LCT.

Overall landscape sensitivity to solar PV and BESS developments

A.276 The Rural Outcrop Hills LCT is of medium-high sensitivity to small scale solar PV and BESS development, and of high sensitivity for medium to large scale solar and BESS development. The reasoning for this is summarised below:

- The hills are prominent features in views from nearby settlements and farmland, particularly from Ratho, and the wider landscape. Large scale development on the hill slopes would be highly visible from the settlement, and incongruous with the relatively small scale and complex topography of the hills, which indicates a higher sensitivity.
- The open character of outward views from the hills also indicates a higher sensitivity to solar PV and BESS development, as development in the foreground of distant outward views would alter the scenic qualities and amenity of views experienced by the frequent recreational receptors in these areas.
- The woodland contributes to a perceived sense of naturalness and tranquillity, particularly contrasting with surrounding areas of developed landscape. This perception would be altered by the introduction solar PV and BESS development.

Variations in sensitivity

A.277 Solar PV or BESS development located on the steep and rugged landform of Kaimes Hill, especially the higher parts closer to the hillforts would be widely

apparent in views from the surrounding landscape and detract from the distinctiveness of the rocky outcrops, which currently contrast with the developed character of the surrounding landscape. These parts of the Kaimes Hill LCA are therefore more sensitive to development than the lower lying pockets around the foot of the hills.

A.278 The woodland associated with Craigie Hill is of particular importance to the wider landscape fabric, as it is seen to connect with the wooded hills of the Dalmeny GDL. Loss of this woodland as a result of solar PV or BESS development would affect this relationship, and affect the sense of place more widely, including that of the hillfort. As such, the steep wooded slopes of Craigie Hill are of higher sensitivity than the lower lying outer areas.

Table A.7: Overall sensitivity scores of the Rural Outcrop Hills LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	Medium-high
Large wind turbines	High
Small solar PV installation	Medium-high
Medium to large solar PV installation	High
Small BESS installation	Medium-high
Medium to large BESS installation	High

Settled Farmland LCT

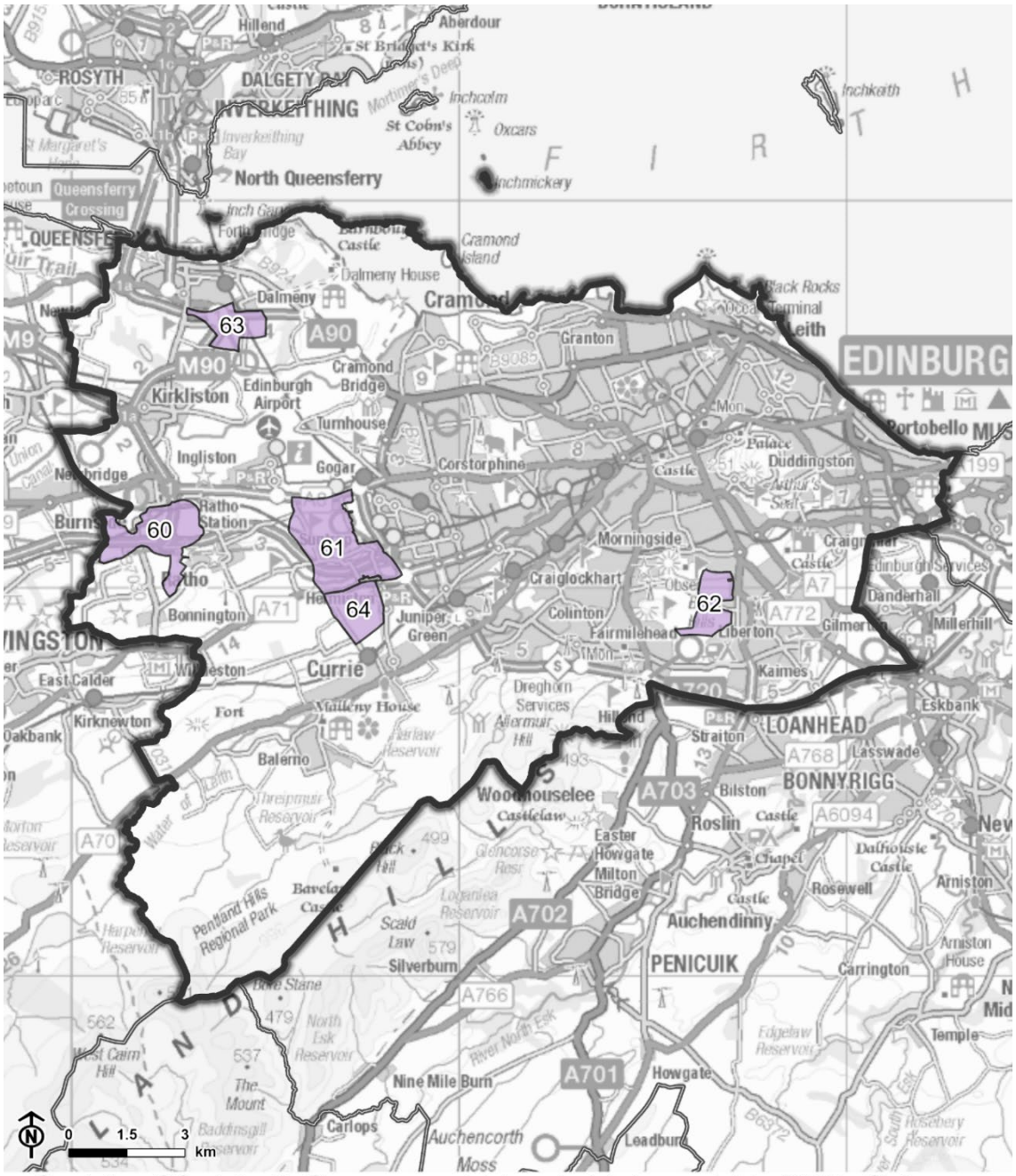
A.279 The Settled Farmland LCT encompasses areas primarily to the west of Edinburgh, with one area within the south of the city, often situated between the edges of areas of settlement and more rural farmland.

Landscape character overview

A.280 The key characteristics of the LCT are described as follows (LUC, 2025):

- *"Generally gently undulating landform, occasionally rising to local ridges.*
- *Often a fragmented landscape with a mix of land uses.*
- *Areas of industrial, commercial and educational land use, and electricity and transportation infrastructure are found within the landscape.*
- *Areas of development exert a strong influence on landscape character. However, some parcels of farmland between developed parts of the landscape retain more rural qualities.*
- *Woodland and field boundaries are often remnant policies.*
- *Lack of prominence where low-lying or visually enclosed, although some parts of the landscape have an important relationship to settlements or other more distinctive landscape features.*
- *Typically forming a transitional landscape between areas of dense settlement and the less developed areas of landscape beyond."*

Figure A.22: Contextual map of the Settled Farmland LCT



City of Edinburgh boundary
Neighbouring Authority boundary
Settled Farmland

Landscape Character Areas

A.281 The Settled Farmland LCT comprises the following Landscape Character Areas (refer to figures in Appendix B):

- Craigpark Fragmented Farmland (60)
- Gogar Farmland (61)
- Liberton Fringes (62)
- Queensferry Fragmented Farmland (63)
- Riccarton Campus (64)

Designated landscapes

A.282 The LCT includes two LLAs; Braids, Liberton and Mortonhall LLA, and Gogar LLA. The reasons for designation (LUC, 2026) of relevance to the LCT are as follows:

- Braids Liberton and Mortonhall LLA:
  - *"The hills and their environs form a prominent skyline of knolly hills distinguishable by their craggy landform and semi-natural landcover. This landscape contributes to the character of adjacent residential neighbourhoods and serves as a landmark in views from the main hills encircling the city"*;
  - The rugged landform of the hills and the semi-natural vegetation contribute to the *"high scenic quality within the LLA and its contrast with the surrounding built environment"*; and
  - The views into the wider rural landscape afford a *"sense of naturalness and tranquillity in close proximity to the urban core"*.
- Gogar LLA:
  - In the north and east of the LLA, the grounds of several estates form a *"wooded backdrop to the west of the city"* and coalesce to *"screen views from the major routes of the A8 and City Bypass"*;
  - *"At lower elevations, woodland also helps screen views of the urban area to the east, contributing to the sense of naturalness in views from minor roads and the Edinburgh-Glasgow railway line"*; and
  - A number of paths including the popular Union Canal Towpath cross through the open landscape, providing recreational opportunities.

Existing renewables development

A.283 There are no operational or under construction wind farms, solar PV or BESS developments in the LCT. Visibility towards wind turbines, solar PV or BESS developments in other LCTs or other local authority areas are limited.

Figure A.23: View north towards policy woodlands within the Gogar Farmland LCA which separates the farmland from the A8

Figure A.24: Striking view to Arthur's Seat from the Liberton Fringes LCA

Landscape Sensitivity Assessment

A.284 The following section sets out an assessment of sensitivity of the LCT in relation to each of the criteria set out in Chapter 2.

Landform and scale

A.285 A medium scale gently undulating landform, with a lack of prominence as experienced from the surrounding landscape. The Liberton Fringes LCA is more elevated and forms an important transition to the higher landform of the Braid Hills, but generally the LCT is low-lying.

A.286 Gentle undulations often descend towards burns, including Gogar Burn and Braid Burn. Other burns including Dolphinton Burn incise the landscape, and the Union Canal carves a level route from east to west.

A.287 Quarrying (in the Craigpark Fragmented Farmland LCA) and bunding around the oil storage depot (in the Queensferry Fragmented Farmland LCA) has influenced the landform, providing further variation.

A.288 The landscape is enclosed, due to its low-lying nature and in some places due to woodland or bunds. The Liberton Fringes area is more open than the majority of the LCT, due to its more elevated position.

Sensitivity

A.289 The landform and scale of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Land cover and scale (including field and settlement patterns)

A.290 A fragmented landscape with a range of land uses, indicating a strong human influence. Commonly crossed by major transport routes.

A.291 Between main roads, the primary land uses are arable farmland and mixed-use or industry, including the large Newbridge Industrial Estate in the west, an oil storage depot in the north, and Heriot Watt University campus in the south.

A.292 Patches of mixed woodland, including areas of Ancient Woodland and policy woodland, grassland and scrub (including gorse) are present amidst the farmland. Policy woodland is notably present within Gogar Farmland LCA, and Ancient

Woodland is a key feature of Riccarton Campus LCA. Areas of woodland present human-scale indicators in the landscape.

A.293 Areas of brownfield land are present including the former Royal Elizabeth Yard within the Queensferry Fragmented Farmland LCA.

Sensitivity

A.294 The landcover of this landscape is of medium sensitivity to wind, solar PV and BESS development.

Historic landscape character

A.295 Overall, the wider legibility of historic features in the landscape is limited, although some features which exert a more local influence are present, such as Liberton Tower and Millburn Tower.

A.296 There are areas of remnant historic policy landscapes including areas of policy woodland, often surrounding Listed buildings, particularly focused in the Gogar Farmland LCA. The Millburn Tower GDL is also located within the Gogar Farmland LCA. Parts of the historic 18th century planting also remain within the adjacent Riccarton Campus LCA.

A.297 The Hermiston Conservation Area is located between the Riccarton Campus and Gogar Farmland LCAs. However, these historic elements form a relatively localised influence on the historic character of the LCT overall.

A.298 The late medieval Liberton Tower forms a prominent landmark in the open landscape of the Liberton Fringes LCA. The WW2 Liberton Battery (a Scheduled Monument), and Liberton House (both within Liberton Fringes LCA) also contribute locally to a sense of history.

Sensitivity

A.299 The historic character of this landscape is of low-medium sensitivity to wind, solar PV and BESS development.

Visual receptors

A.300 The LCT is situated near several settlements, including Ratho and Ratho Station to the west, South Queensferry and Dalmeny to the north, and Edinburgh city

to the east. The areas of Craigpark Fragmented Farmland and Queensferry Fragmented Farmland LCAs are relatively well screened from their surrounding settlements, due to main roads and railways which are often lined by trees, although glimpsed views into the landscape are experienced by road users.

A.301 Hermiston village is located along the southern edge of the Gogar Farmland LCA and important views across the landscape to the north, which contribute to the setting and identity of the village, are experienced by residential receptors.

A.302 There is a high density of visual receptors at the business and university campuses in the Gogar Farmland LCA, Riccarton Campus LCA, and adjacent to the Liberton Fringes LCA.

A.303 The Liberton Fringes LCA is located adjacent to the dense urban edge of Liberton and has a strong visual relationship with this area. It is well used by recreational walkers on the paths and minor roads.

A.304 Views of the Liberton Fringes LCA are experienced by sensitive recreational receptors at Blackford Hill and the Braid Hills, and in more distant views from Arthur's Seat.

A.305 The landscape is crossed by the major recreational route of the Union Canal/ NCN Route 754. Core Paths and PRoWs allow further opportunities to experience of the landscape, as do several golf courses.

Sensitivity

A.306 The visual receptors of this landscape are of medium-high sensitivity to wind, solar PV and BESS development.

Visual character (including skylines and intervisibility)

A.307 Perimeter tree belts tend to limit views to and from the LCT, particularly for the Riccarton Campus and Gogar Farmland LCAs. Skylines of this predominantly low-lying landscape are relatively simple, and typically wooded.

A.308 Views experienced within the Gogar Farmland LCA, and glimpsed views into the area, generally focus across the gently undulating landscape, with receding layers of woodland. The character of these views helps reinforce the contrast between the urban edge of Edinburgh and the less developed landscape to the west of the City Bypass. This is important in reinforcing the settlement identify of Hermiston village, for example.

A.309 More open views are experienced in the east from the Liberton Fringes LCA, where the dense urban edge of Edinburgh is visually prominent and contrasts with the relatively rural character of this landscape. There is intervisibility with other elevated areas in Edinburgh, with striking views being available to the surrounding hills. When seen from the wider city context, the Liberton Fringes LCA forms a distinctive transitional area between the urban edge, Blackford Hill and the Braid Hills. Liberton Tower forms an attractive landmark on the skyline of this LCA.

A.310 The numerous paths and tracks in the area provide recreational opportunities. The Union Canal Towpath provides a key recreational asset. Golf courses, sports facilities at Oriam (on the Heriot Watt University Campus), outdoor rock climbing and surfing at Ratho Quarry provide further recreational opportunities.

Sensitivity

A.311 The visual character of this landscape is of medium-high sensitivity to wind development and medium sensitivity to solar PV and BESS development.

Perceptual and scenic qualities

A.312 This LCT typically forms a transitional landscape between areas of dense settlement and the less developed more rural landscape beyond.

A.313 Noise associated with the transport routes which pass through or near the LCT influence the sense of tranquillity, though woodland along these routes limits their visual influence Industrial land use within the LCT presents a modern influence.

A.314 Parts of Gogar Farmland and Liberton Fringes LCAs have higher levels of tranquillity due to less fragmentation and disturbance from roads, with a more limited influence of human activity and greater combination of semi-natural and historic features which lead to a higher scenic value.

Sensitivity

A.315 The perceptual and scenic qualities of this landscape are of medium sensitivity to wind, solar PV and BESS development.

Overall landscape sensitivity to wind energy development

A.316 The Settled Farmland LCT is of medium-high sensitivity to small to medium wind turbines and high sensitivity to large wind turbines. The reasoning for this is summarised below:

- The fragmented character of the landscape and strong presence of human activity, including main roads and industrial estates, indicates a lower sensitivity to wind turbines.
- The wider legibility of historic features in the landscape is relatively limited, although some features exert a more local influence. The introduction of wind turbines would alter the appreciation of these features, particularly Liberton Tower and Millburn Tower (and GDL).
- The presence of policy woodland and human scale features, particularly within the Gogar Farmland and Riccarton Campus LCAs, increases the sensitivity to wind turbines, providing a more domestic character and scale which would be adversely affected by wind farm development.
- The LCT forms a transitional landscape between areas of dense settlement and less developed landscape, with areas providing a setting to settlements (particularly the Liberton Fringes LCA). Introduction of wind turbines will increase the human influence within these areas, reducing the contrast between the settled areas and the less developed farmland around their peripheries.
- The high level of residential and recreational receptors in close proximity to these areas, and the weight afforded to views experienced by these sensitive receptors, increases their sensitivity.
- The recreational value of the Union Canal and its towpath, as well as other well walked paths, tracks and waterside routes, from which sequential effects could be experienced, increases sensitivity.

Variations in sensitivity

A.317 Areas with a strong existing human influence resulting in a fragmented character, including the Queensferry Fragmented Farmland and Craigpark Fragmented Farmland LCAs, are of slightly lower sensitivity to wind turbines. However, proximity of these LCAs to areas of settlement indicates higher sensitivity.

Overall landscape sensitivity to solar PV and BESS developments

A.318 The Settled Farmland LCT is of medium sensitivity to small solar PV and BESS development and high sensitivity to medium to large scale solar PV and BESS development. The reasoning for this is summarised below:

- The fragmented character of the landscape and strong presence of large-scale human-made features, including main roads and industrial estates, indicates a lower sensitivity to solar and BESS developments, noting that there are already has large-scale industrial buildings that are comparable to BESS development.
- The limited intervisibility with surrounding areas indicates a lower sensitivity, with surrounding woodland and tree belts providing opportunities to screen and filter views of solar PV and BESS development. However, the highly visible slopes of the Liberton Fringes LCA are of higher sensitivity given their elevation and open character.
- Whilst woodland and tree belts contribute to opportunities for screening, the remnant policy and Ancient Woodland is a sensitive feature and may be changed by the associated infrastructure required for solar PV and BESS, including access tracks. The pattern of woodland within the Gogar Farmland and Riccarton Campus LCAs is particularly sensitive.
- The presence of large numbers of visual receptors living adjacent to and undertaking recreation within this landscape increase sensitivity, given the city edge landscape is very highly valued as remnant areas of undeveloped land.
- The recreational value of the Union Canal and its towpath, as well as other tracks and paths from which sequential effects could be experienced, increase sensitivity.

Variations in sensitivity

A.319 The elevation and open character of the Liberton Fringes LCA result in the landscape being visible from other parts of the city, which increases the sensitivity to solar PV and BESS development. Solar PV and BESS development would contrast with the landscape pattern and balance of land uses in this area, which provides an important transition from the urban edge to Blackford Hill and the Braid Hills, and contains sensitive features such as Liberton Tower and Mortonhall.

A.320 Policy woodlands associated with the Gogar Farmland and Riccarton Campus LCAs, which contribute to historic and scenic value, are of increased sensitivity, as masking of these features through the introduction of solar PV or BESS development would alter the landscape pattern and balance of land uses. The Gogar Farmland

LCA is less fragmented and developed and provides an important function as a relatively undeveloped area, with some surviving historic elements such as Millburn Tower. The introduction of solar PV and BESS development would alter the perception of a less developed landscape, increasing sensitivity. Areas with a strong existing human influence resulting in a fragmented character, including the Queensferry Fragmented Farmland and Craigpark Fragmented Farmland LCAs, are of slightly lower sensitivity to wind turbines. However, proximity of these LCAs to areas of settlement indicates higher sensitivity.

Table A.8: Overall sensitivity scores of the Settled Farmland LCT

Development Typology	Sensitivity Score
Small to medium wind turbines	Medium-high
Large wind turbines	High
Small solar PV installation	Medium
Medium to large solar PV installation	High
Small BESS installation	Medium
Medium to large BESS installation	High

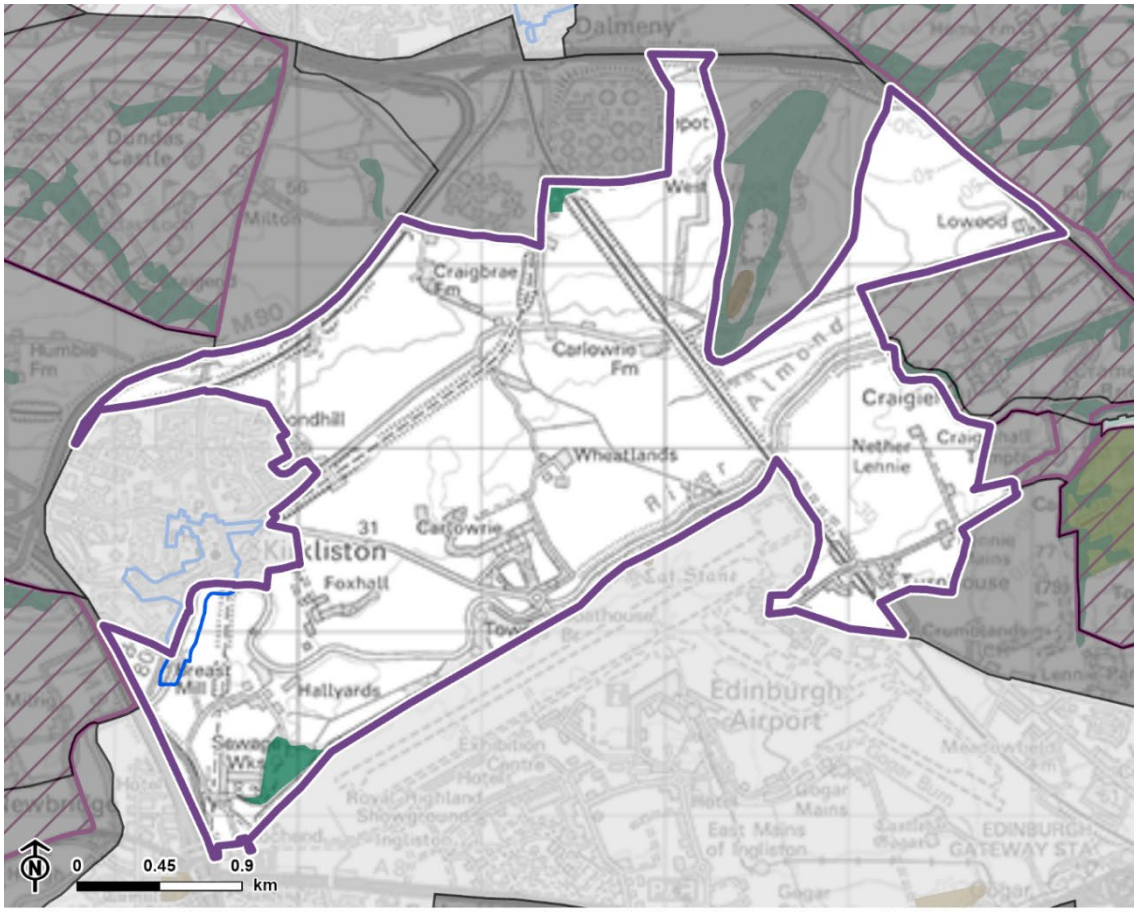
Appendix B
LCA Figures

B.1 This appendix contains maps for individual LCAs located within the LCTs considered within the assessment, overlaid with natural heritage and historic environment designations.

B.2 Landscape designations including country parks and regional parks are also shown on the maps. To aid legibility Local Landscape Areas are not shown on the maps for individual LCAs, but they can be seen on the overview map on Figure 2.6: Landscape and Natural Heritage Designations.

Lowland Farmland LCT

Figure B.1: Almond Valley LCA



Lowland Farmland: Almond Farmland

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Ancient Woodland

Local Nature Reserve

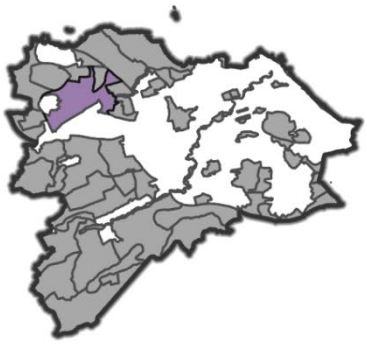
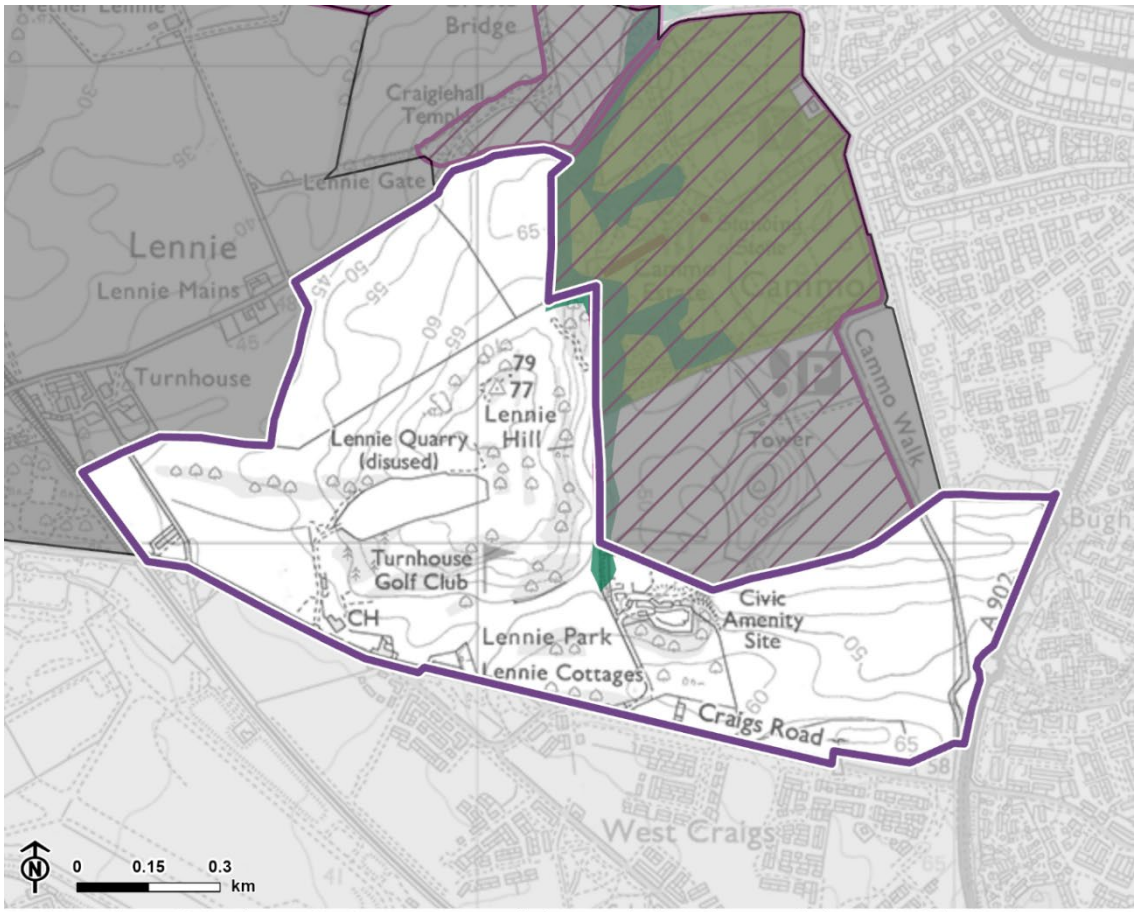


Figure B.2: Cammo Fringes LCA



Lowland Farmland: Cammo Fringes

Neighbouring Landscape Character Area

Gardens and Designed

Scheduled monument

Ancient Woodland

Local Nature Reserve

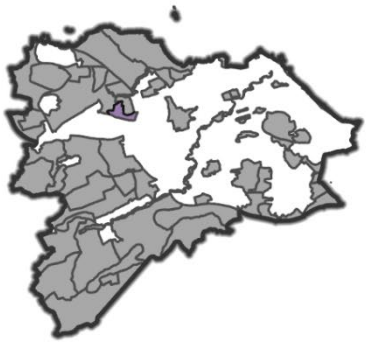
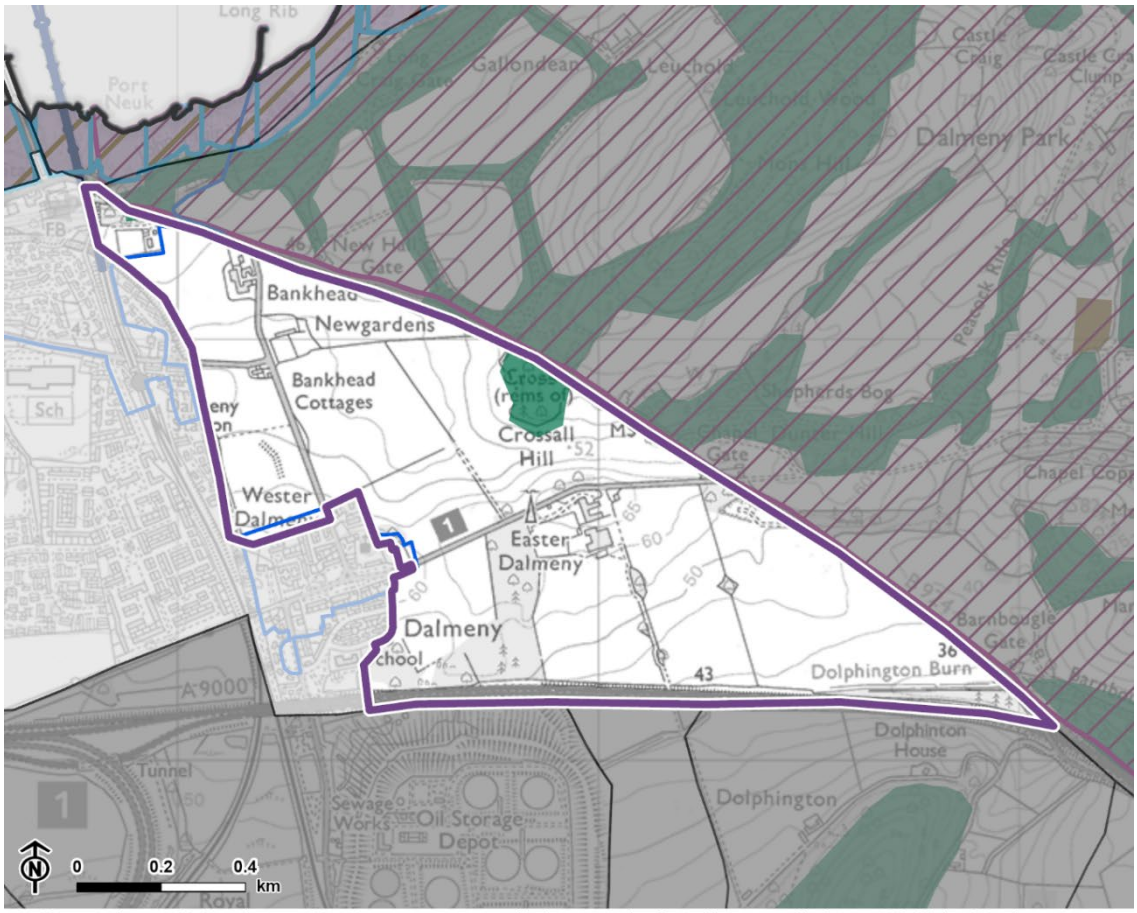


Figure B.3: Dalmeny Fringes LCA



Contains OS data © Crown copyright and database rights 2025. Ordnance Survey AC0000849421.

- Lowland Farmland: Dalmeny Fringes
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Special Protection Area
- World Heritage Site
- Gardens and Designed
- Ramsar site
- Scheduled monument
- Site of Special Scientific Interest
- Ancient Woodland

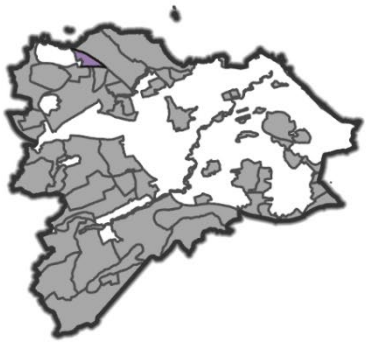
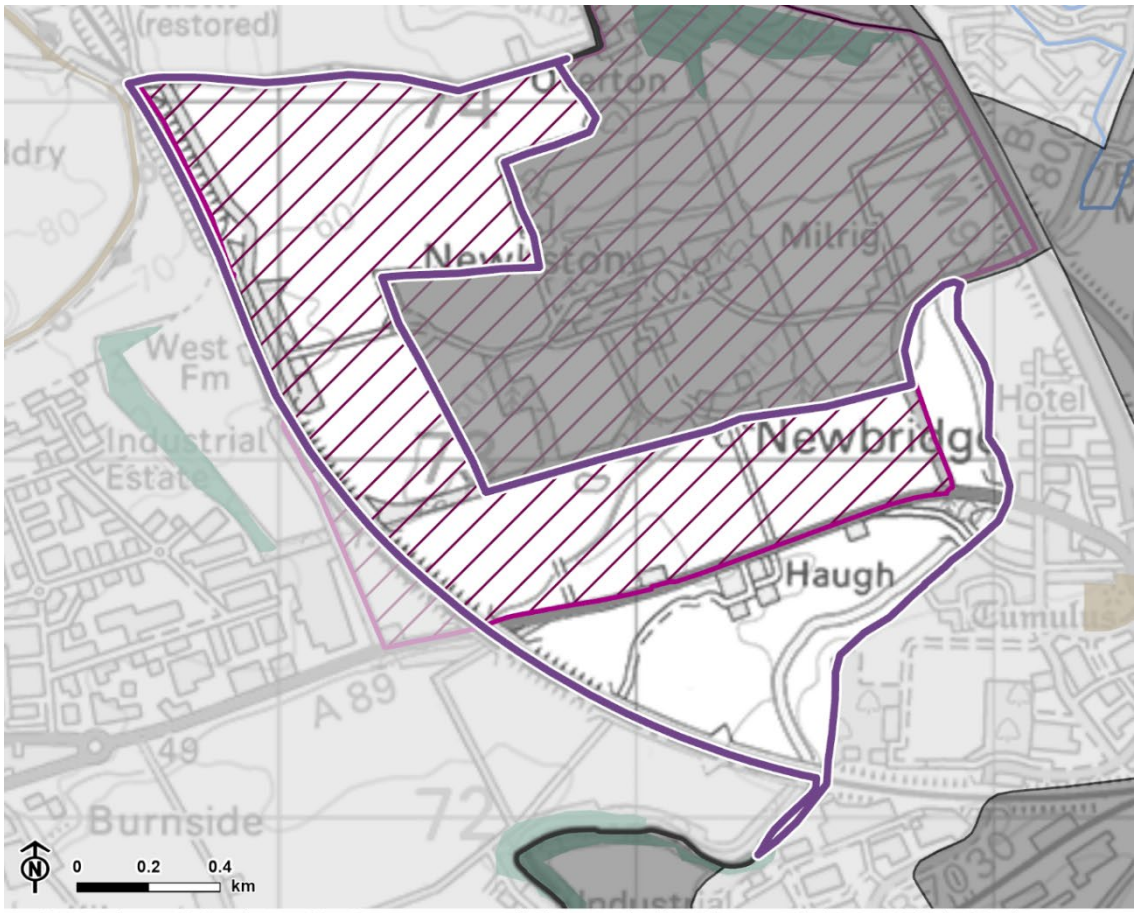


Figure B.4: Newbridge/Broxburn Farmland LCA



Lowland Farmland: Newbridge/ Broxburn Farmland

City of Edinburgh boundary

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Ancient Woodland

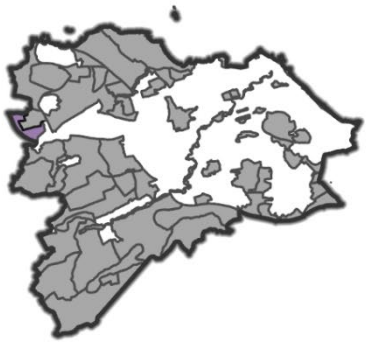
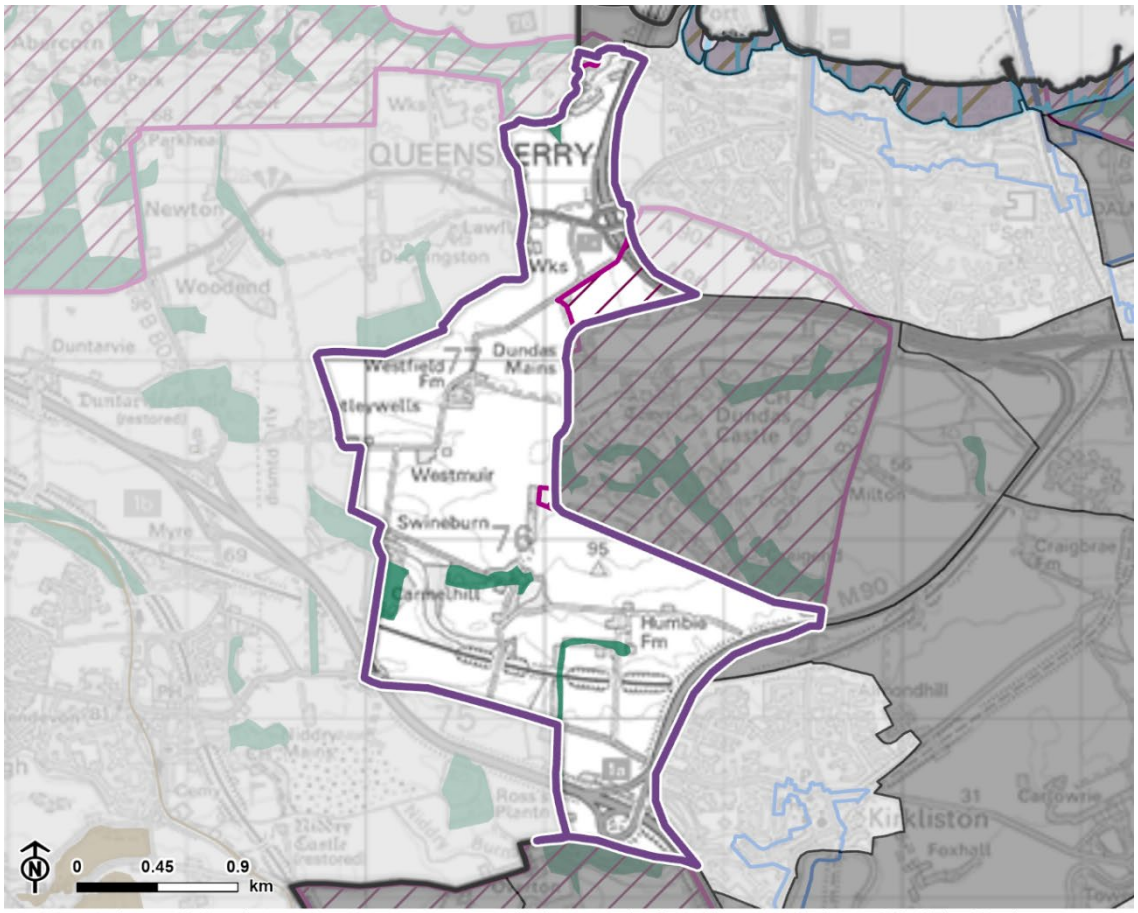
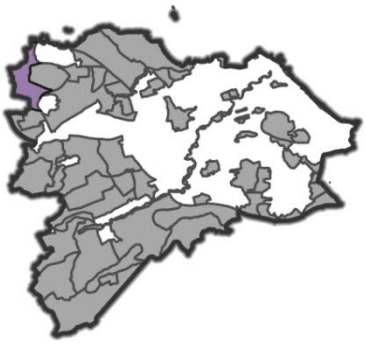


Figure B.5: Newton Farmland LCA

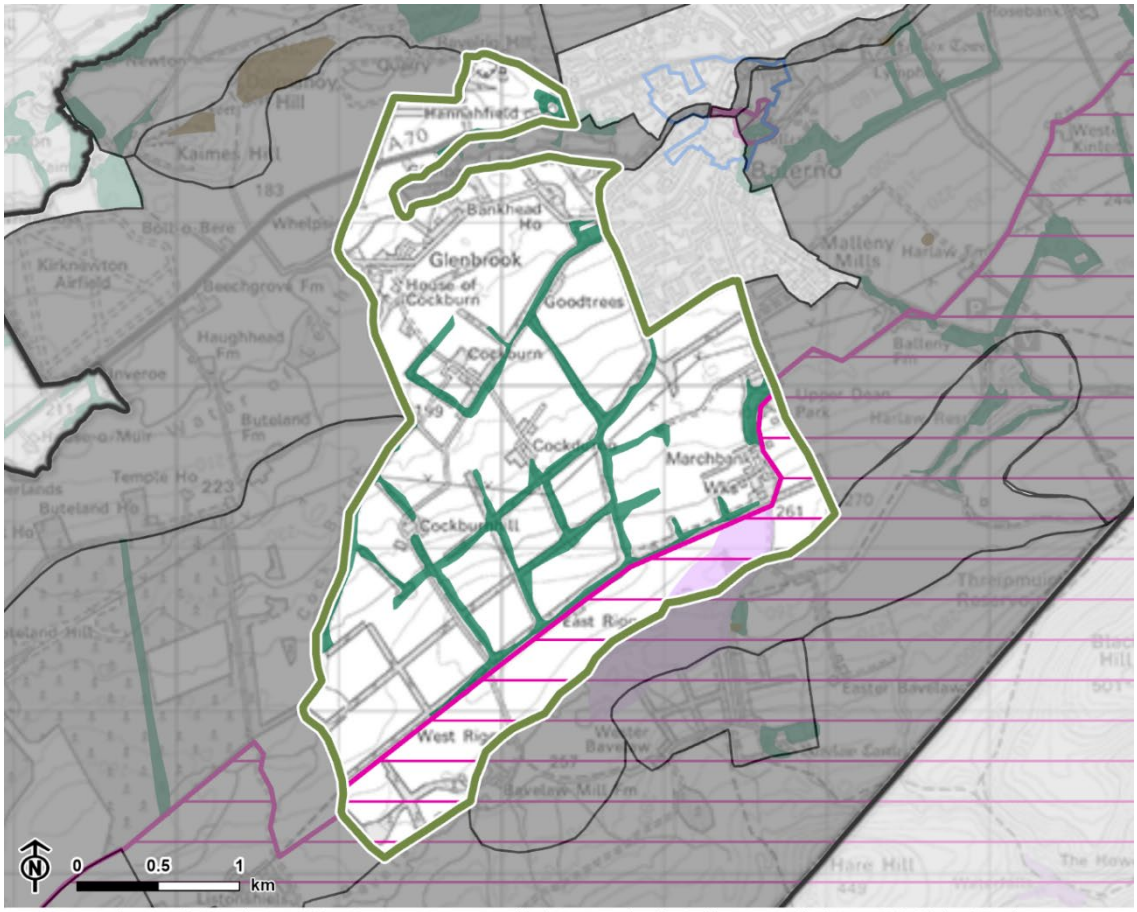


- Lowland Farmland: Newton Farmland
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Special Protection Area
- World Heritage Site
- Gardens and Designed
- Ramsar site
- Scheduled monument
- Site of Special Scientific Interest
- Ancient Woodland



Pentland Flanks LCT

Figure B.6: Cockburn Farmland and Shelterbelts LCA



- Pentland Flanks: Cockburn Farmland and Shelterbelts
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Regional Park
- Gardens and Designed
- Scheduled monument
- Site of Special Scientific Interest
- Ancient Woodland

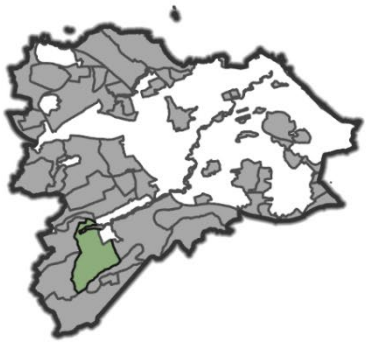
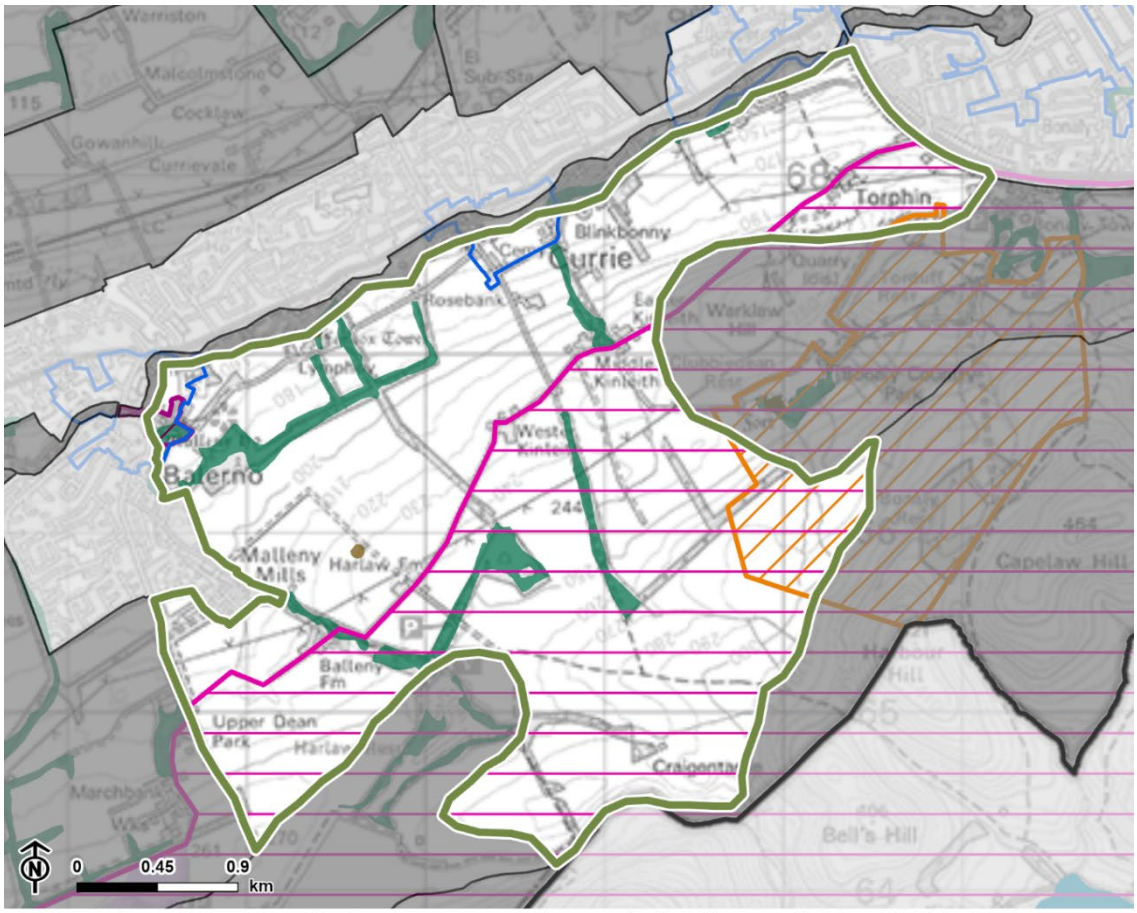


Figure B.7: Currie Farmland Slopes LCA



Pentland Flanks: Currie Farmland Slopes
City of Edinburgh boundary
Neighbouring Landscape Character Area

Conservation area
Regional Park
Gardens and Designed
Country Park
Battlefield inventory
Scheduled monument
Site of Special Scientific Interest
Ancient Woodland

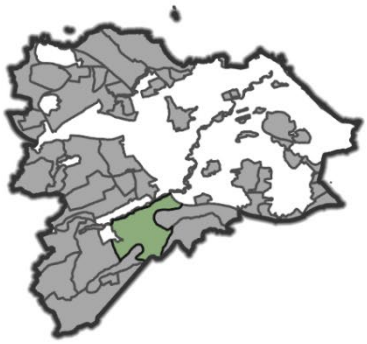
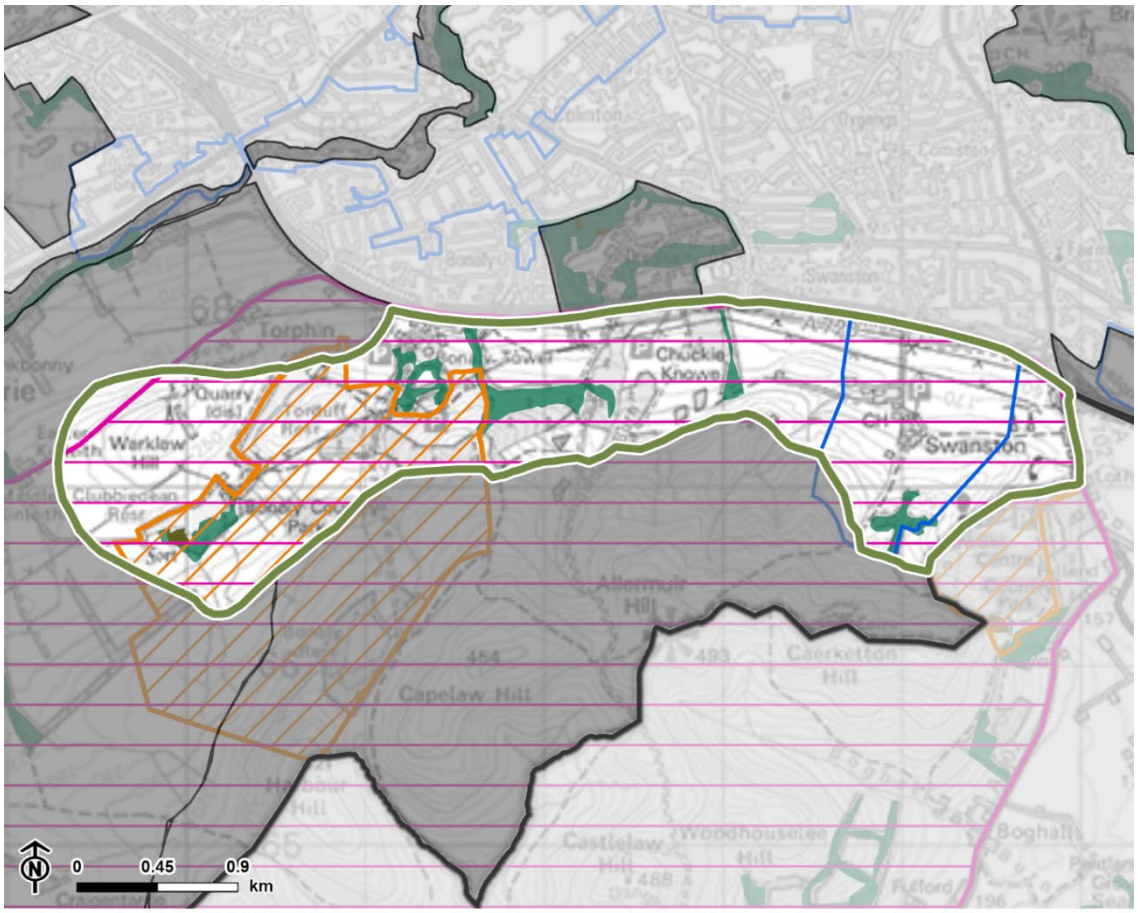


Figure B.8: North Pentland Slopes LCA



Pentland Flanks: North Pentland Slopes
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Regional Park
Country Park
Scheduled monument
Ancient Woodland

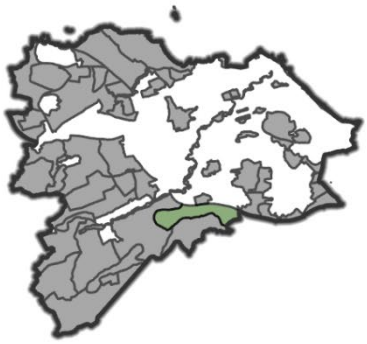


Figure B.9: Redford Basin LCA

Pentland Flanks: Redford Basin
City of Edinburgh boundary
Neighbouring Landscape Character Area
Regional Park
Scheduled monument
Site of Special Scientific Interest
Ancient Woodland

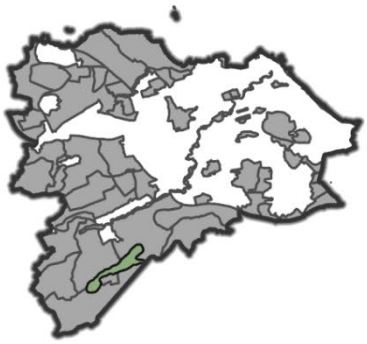
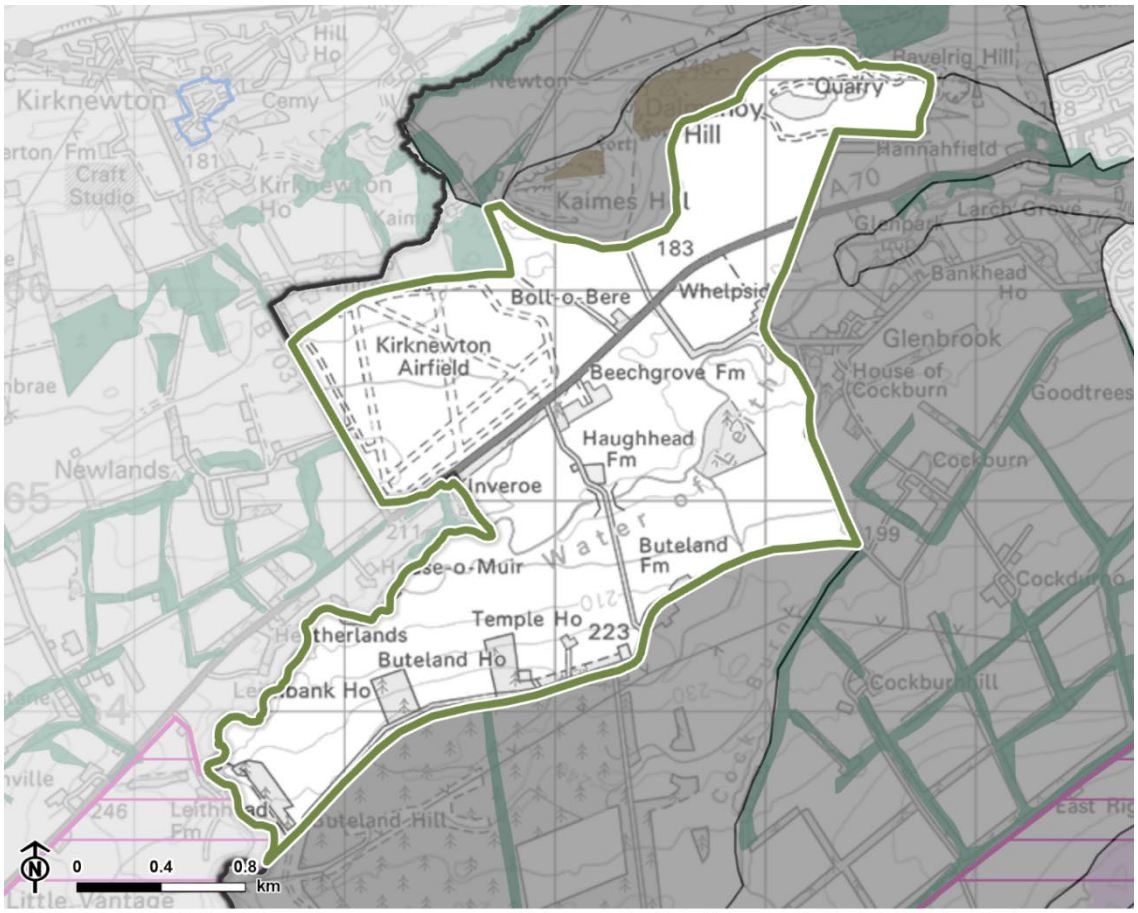


Figure B.10: Water of Leith Farmland Slopes LCA



- Pentland Flanks: Water of Leith Farmland Slopes
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Regional Park
- Scheduled monument
- Site of Special Scientific Interest
- Ancient Woodland

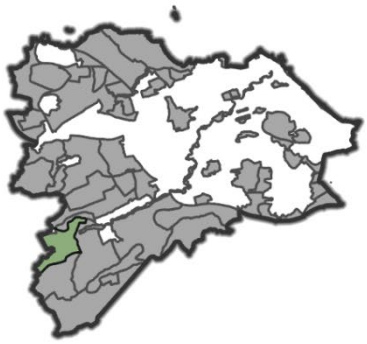
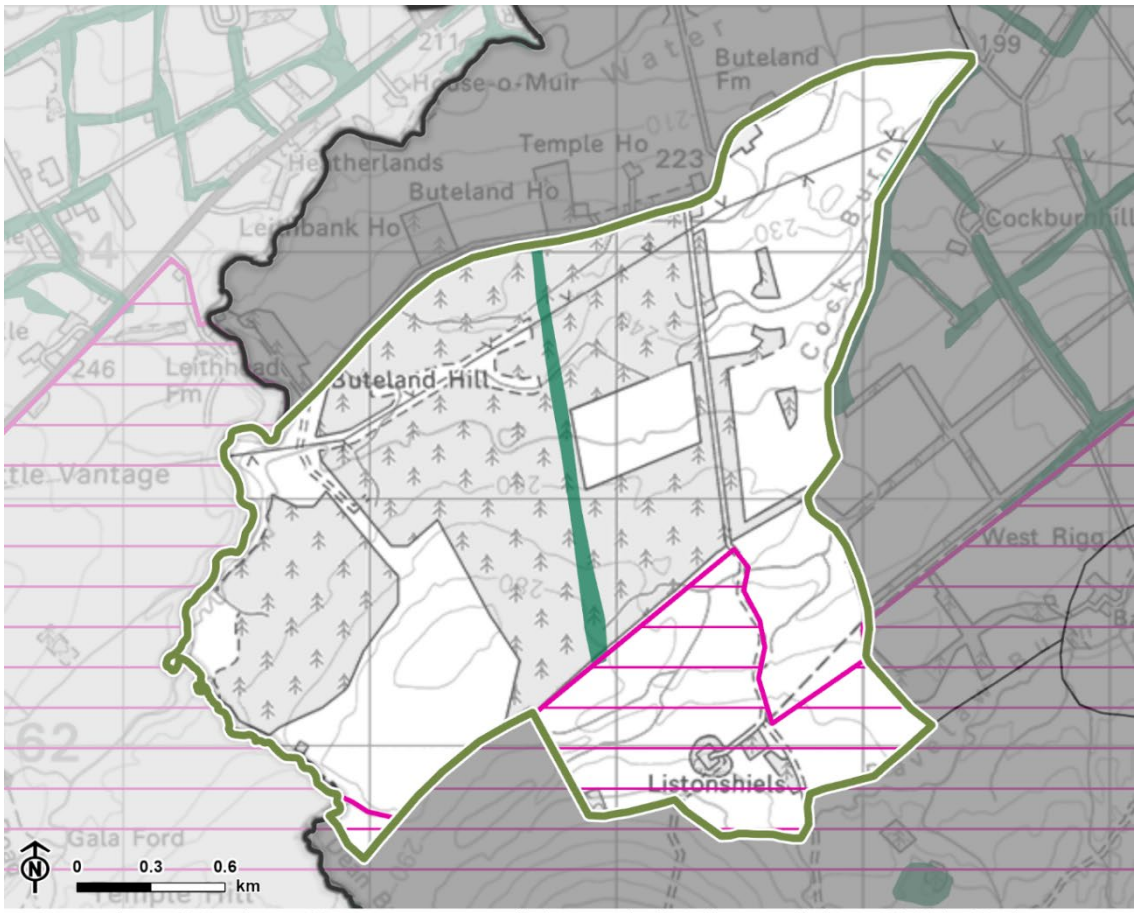


Figure B.11: West Pentland Fringe LCA



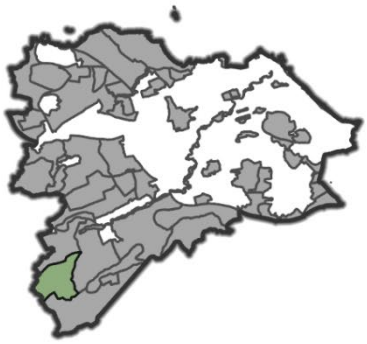
Pentland Flanks: West Pentland Fringe

City of Edinburgh boundary

Neighbouring Landscape Character Area

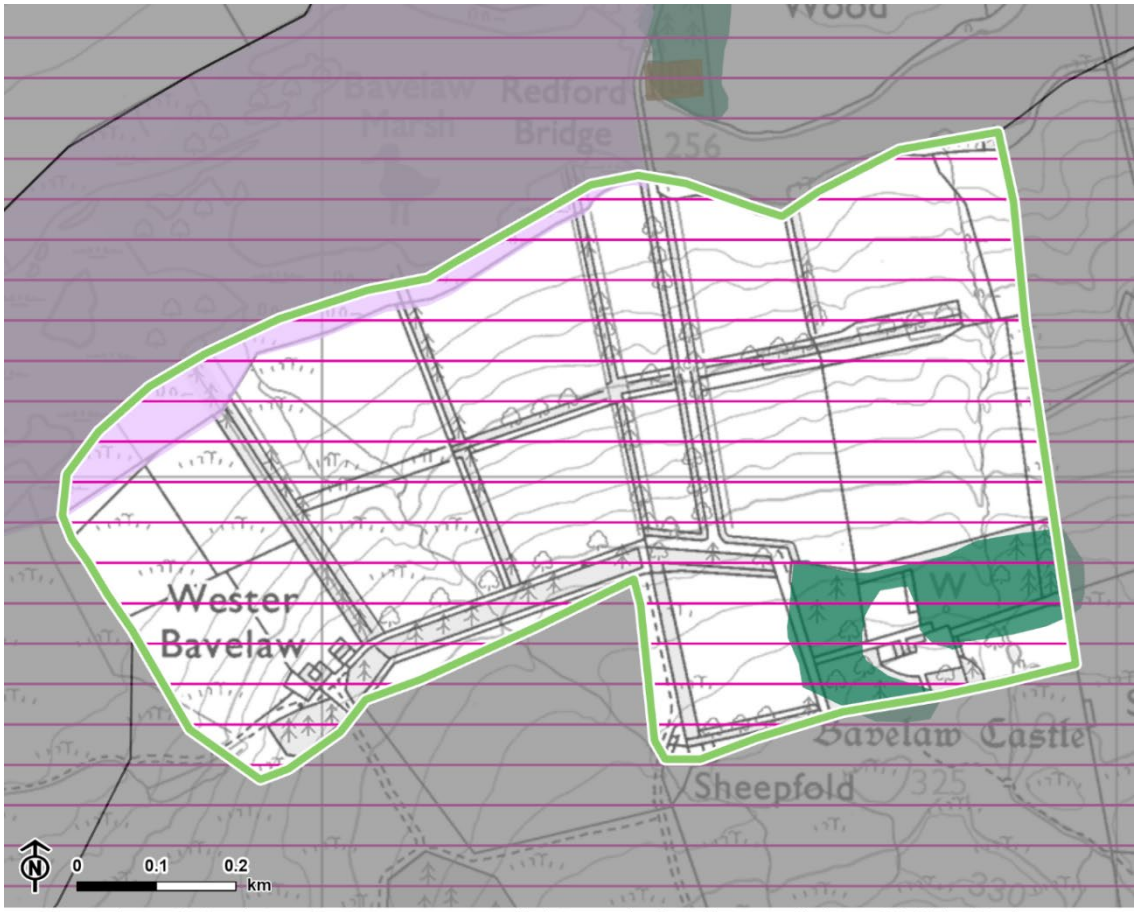
Regional Park

Ancient Woodland



Pentland Hills – Upper Slopes and Summits LCT

Figure B.12: Bavelaw Farmland and Shelterbelts LCA



Pentland Hills - Upper Slopes and Summits: Bavelaw Farmland and Shelterbelts

Neighbouring Landscape Character Area

Regional Park

Scheduled monument

Site of Special Scientific Interest

Ancient Woodland

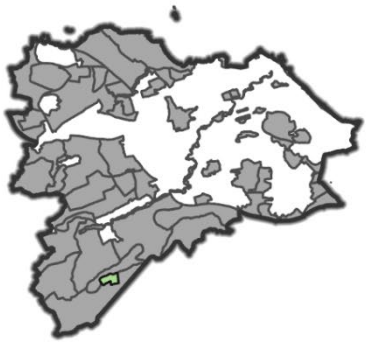
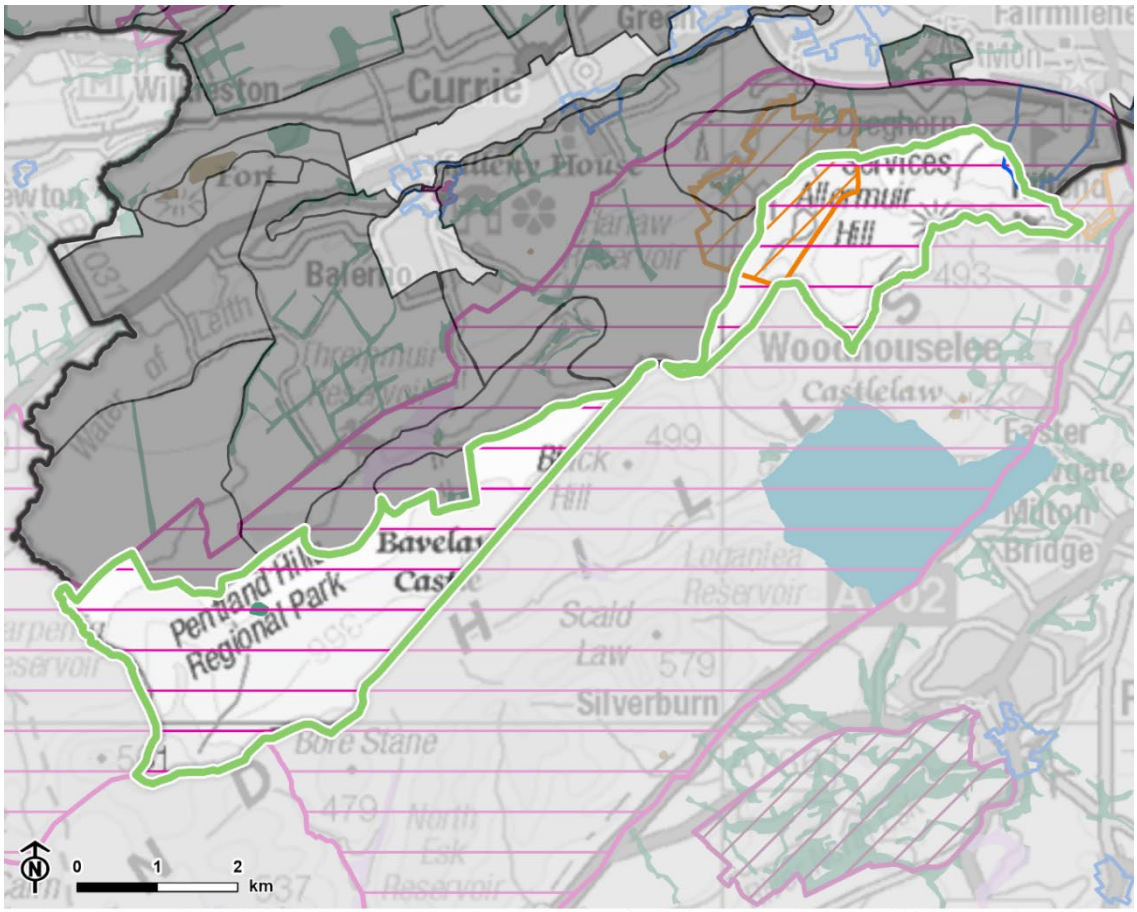


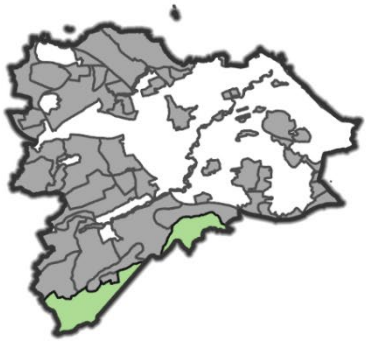
Figure B.13: Pentland Hills and Ridges LCA



Pentland Hills - Upper Slopes and Summits: Pentland Hills and Ridges

City of Edinburgh boundary

Neighbouring Landscape Character Area



Conservation area

Regional Park

Gardens and Designed

Country Park

Battlefield inventory

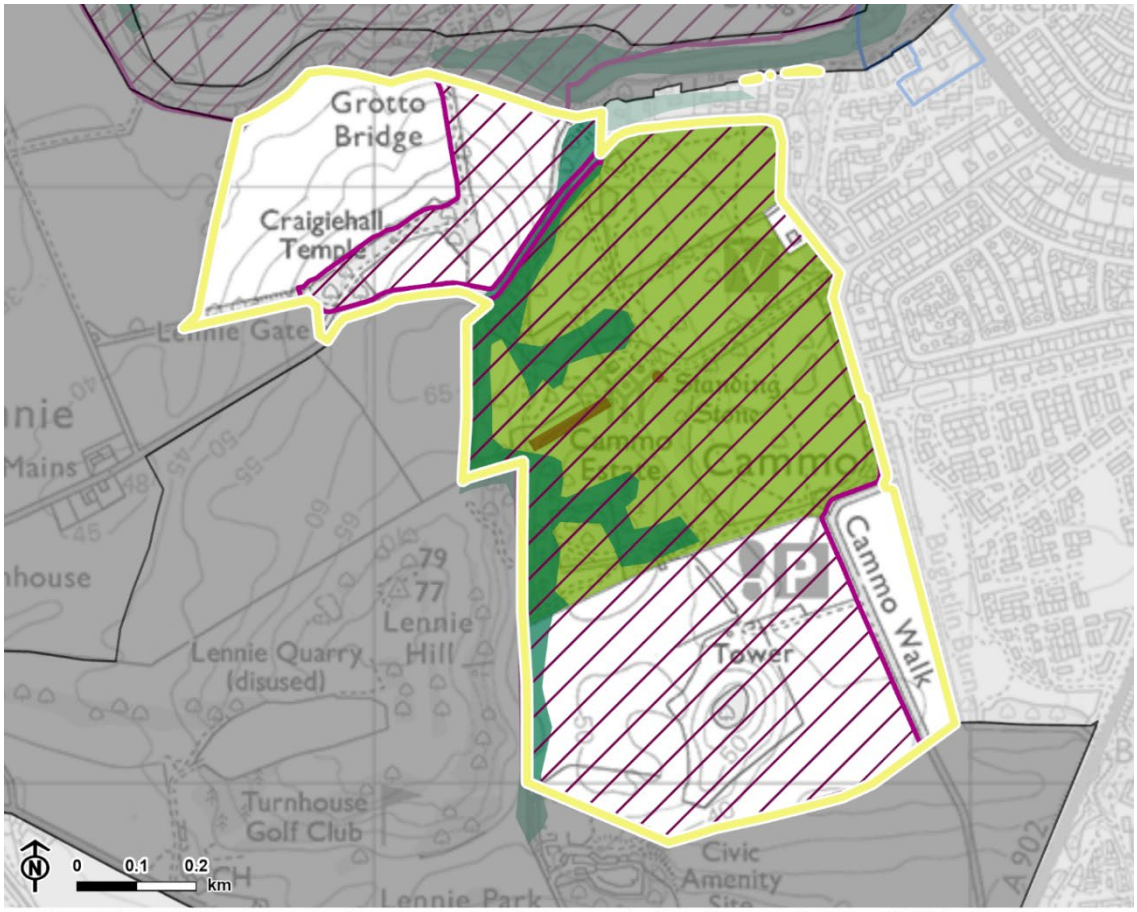
Scheduled monument

Site of Special Scientific Interest

Ancient Woodland

Policy Landscape LCT

Figure B.14: Cammo Policies LCA



Policy Landscape: Cammo Policies

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Ancient Woodland

Local Nature Reserve

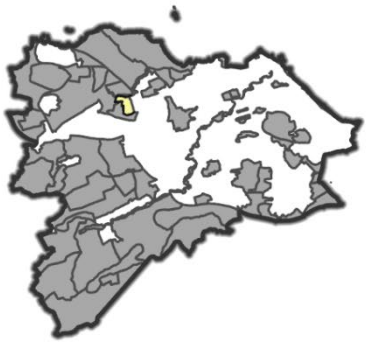
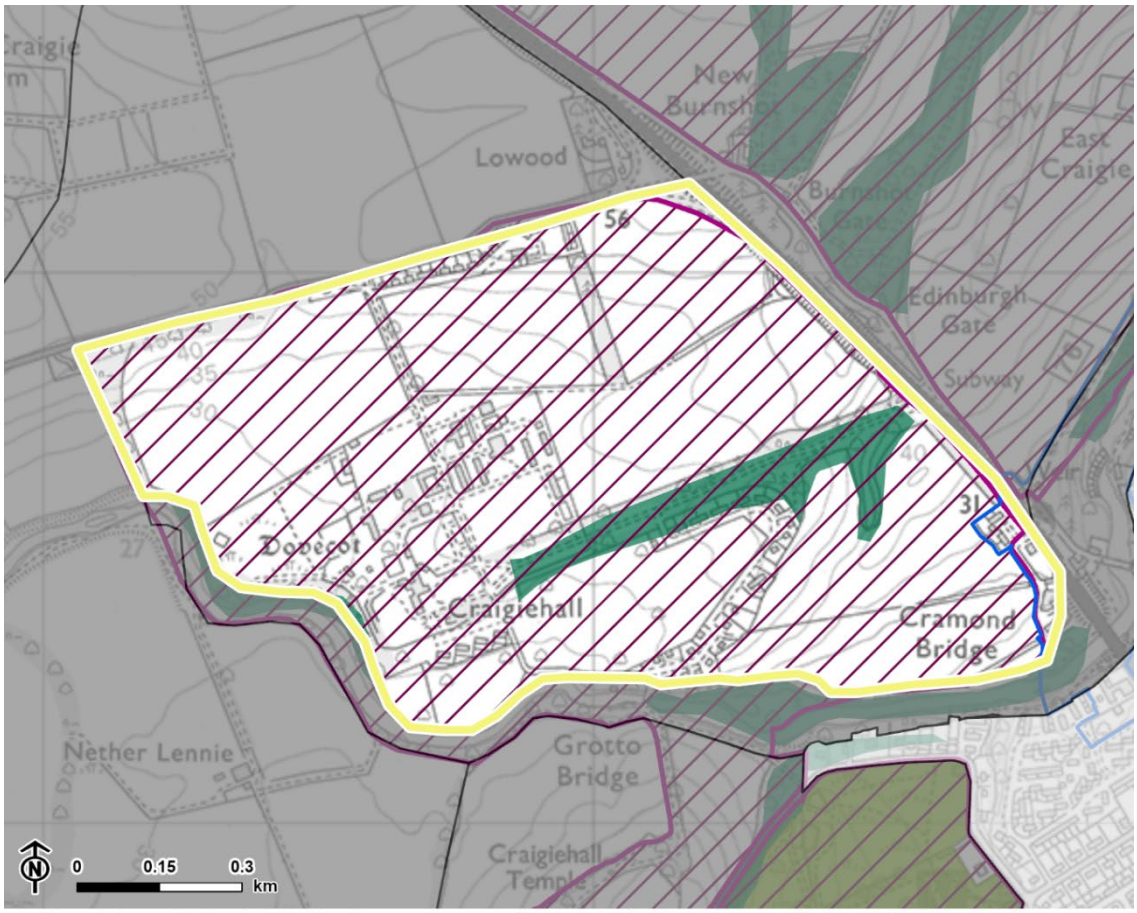


Figure B.15: Craigiehall Policies LCA



Policy Landscape: Craigiehall Policies

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Ancient Woodland

Local Nature Reserve

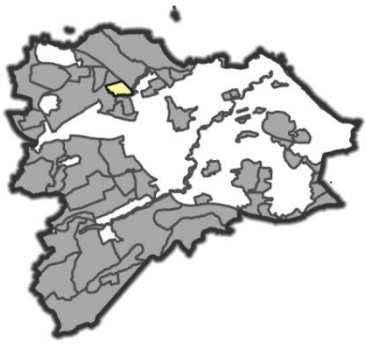
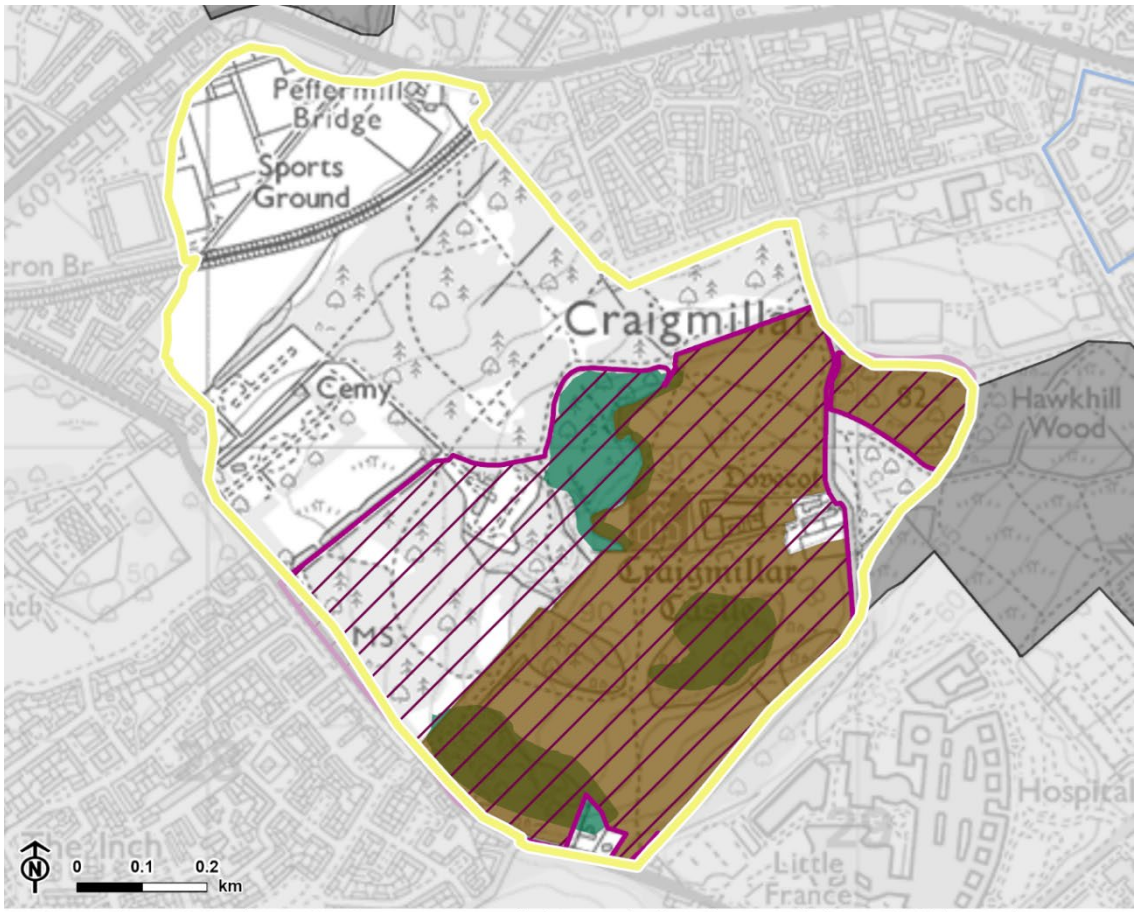


Figure B.16: Craigmillar Policies LCA



Policy Landscape: Craigmillar Policies

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Ancient Woodland

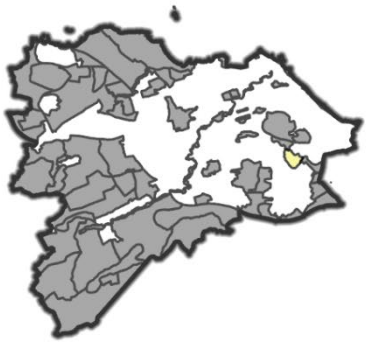
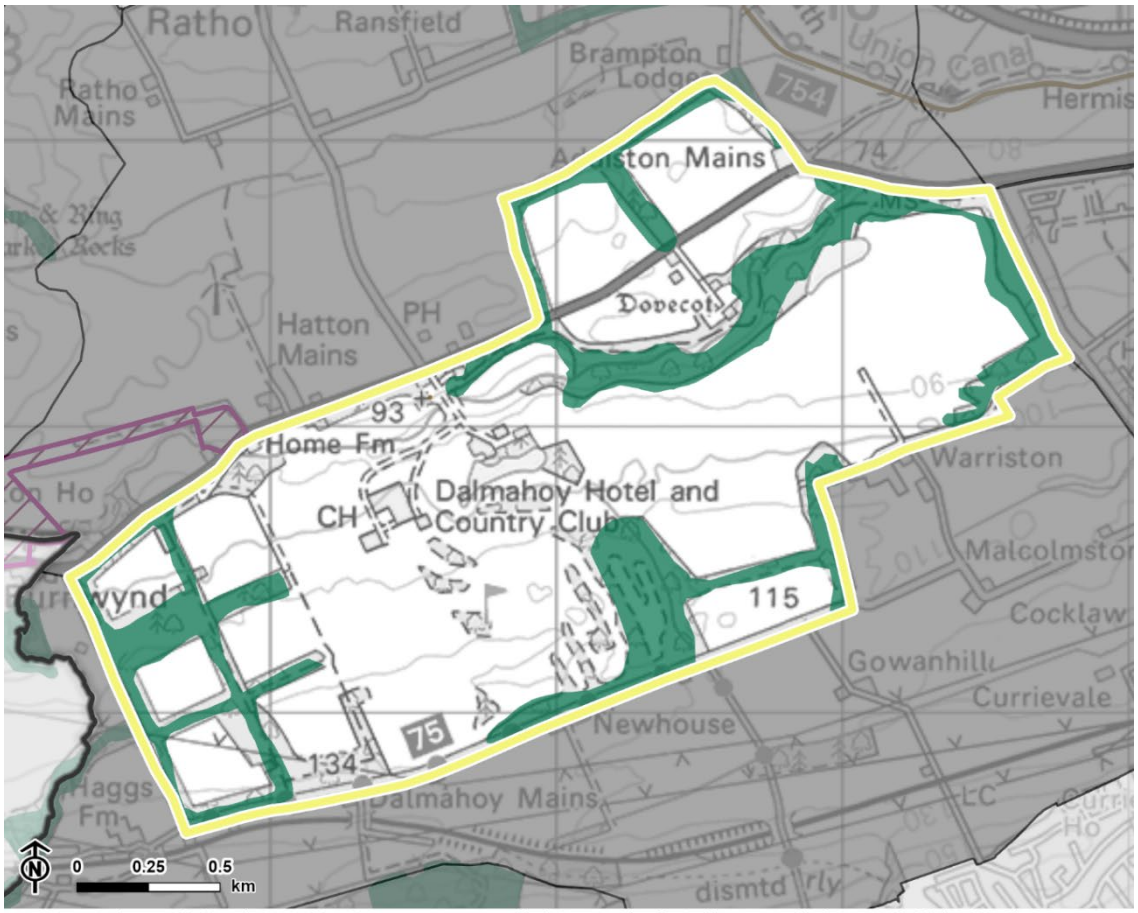


Figure B.17: Dalmahoy Policies LCA



Policy Landscape: Dalmahoy Policies

City of Edinburgh boundary

Neighbouring Landscape Character Area

Gardens and Designed

Scheduled monument

Ancient Woodland

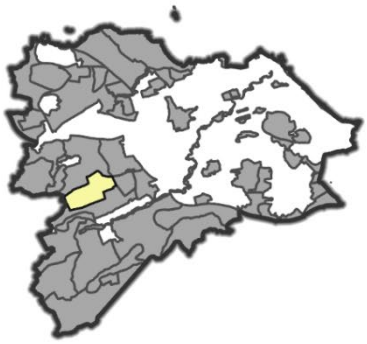
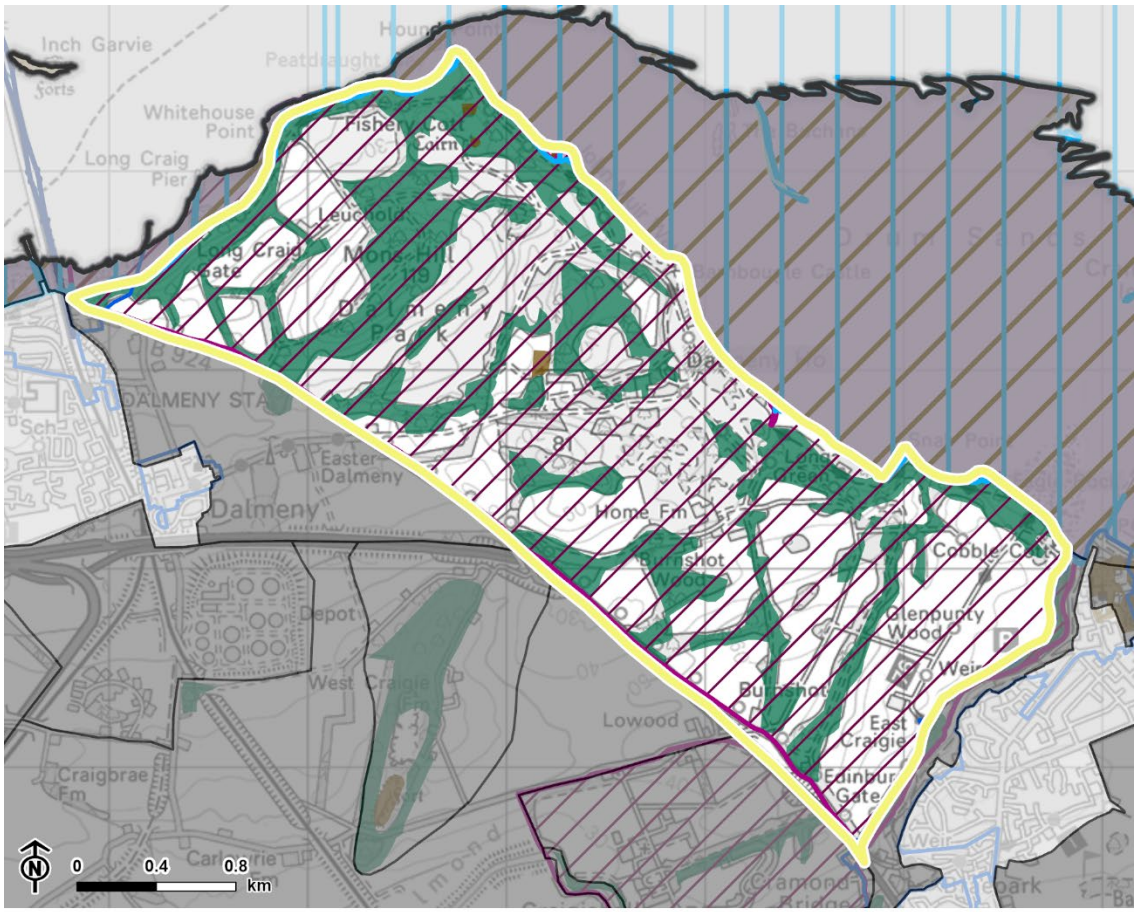


Figure B.18: Dalmeny Policies LCA



- Policy Landscape: Dalmeny Policies
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Special Protection Area
- World Heritage Site
- Gardens and Designed
- Ramsar site
- Scheduled monument
- Site of Special Scientific Interest
- Ancient Woodland

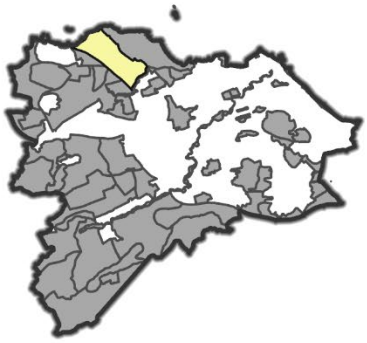
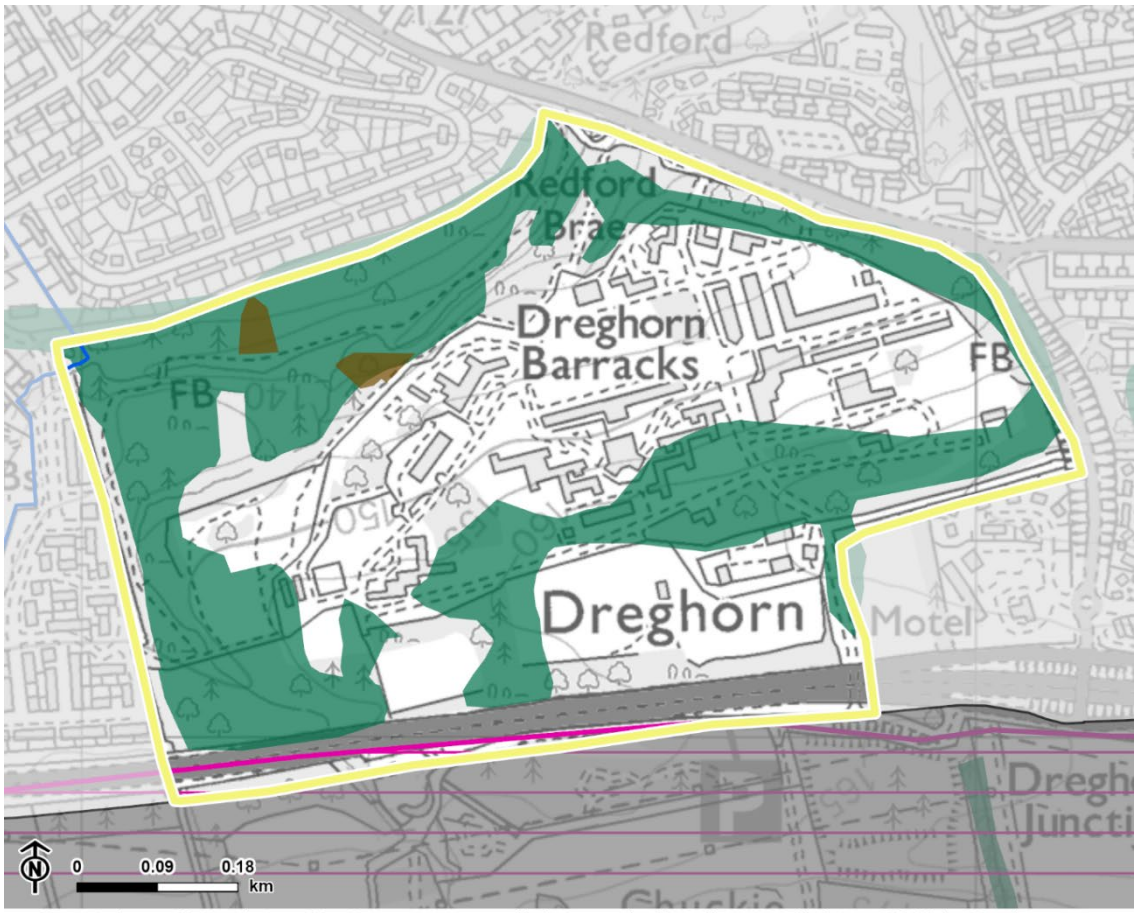


Figure B.19: Dreghorn Policies LCA



Contains OS data © Crown copyright and database rights 2025. Ordnance Survey AC0000849421.

Policy Landscape: Dreghorn Policies

Neighbouring Landscape Character Area

Conservation area

Regional Park

Scheduled monument

Ancient Woodland

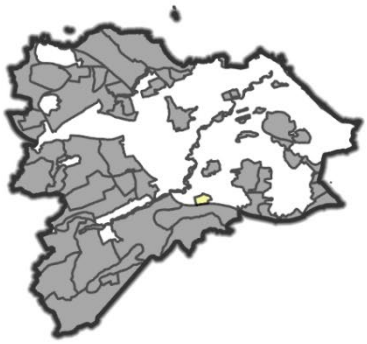
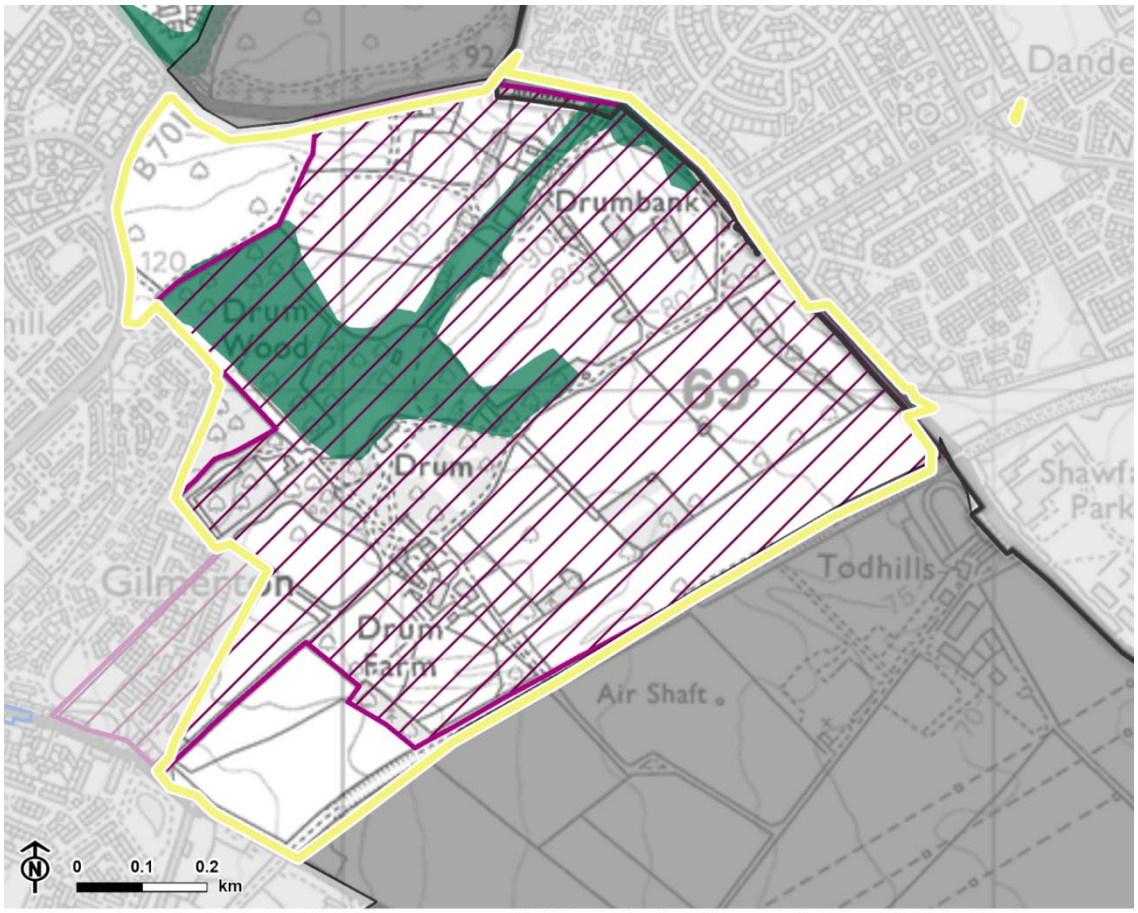


Figure B.20: Drum Policies LCA



Policy Landscape: Drum Policies
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Gardens and Designed
Ancient Woodland

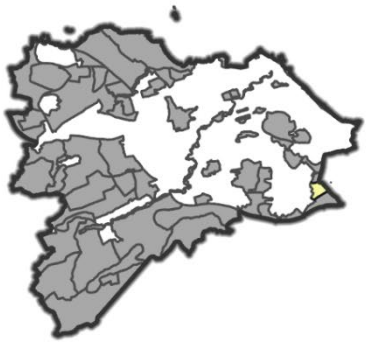
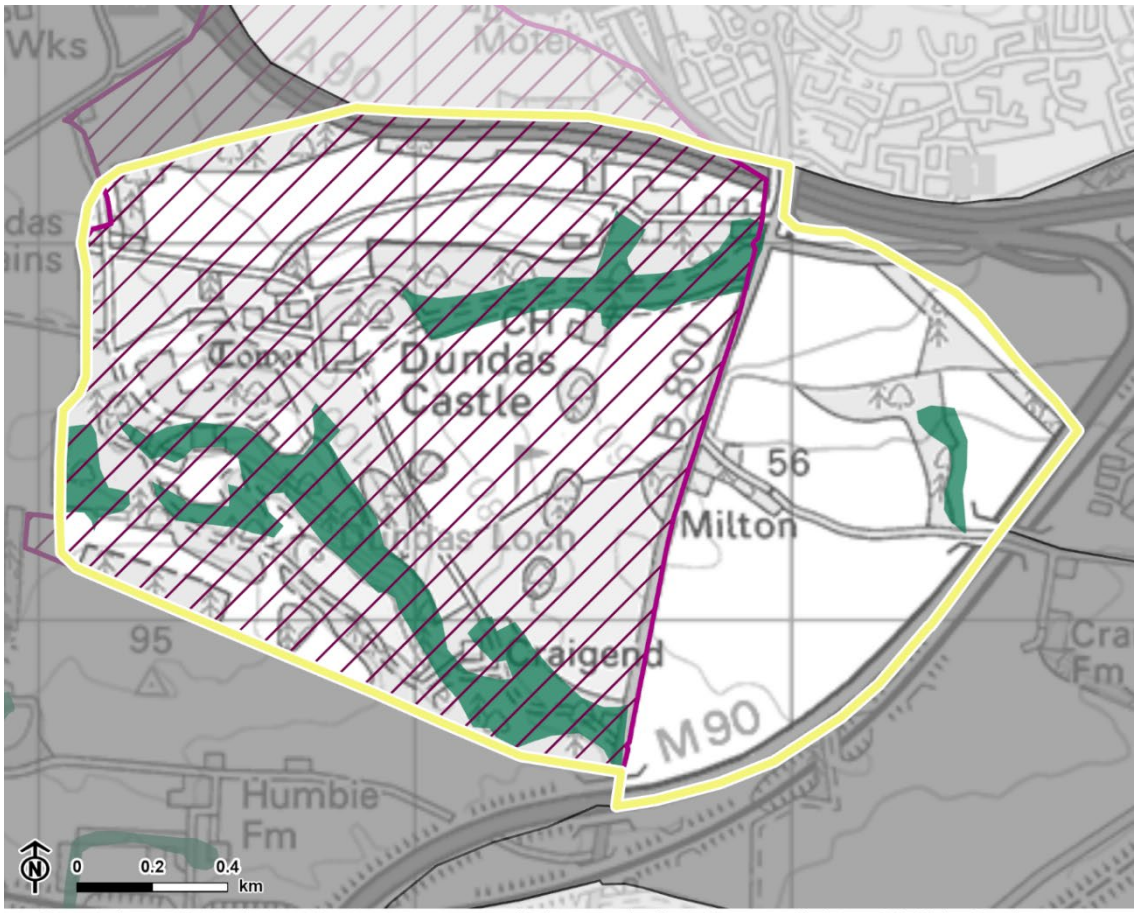


Figure B.21: Dundas Policies LCA



Policy Landscape: Dundas Policies
City of Edinburgh boundary
Neighbouring Landscape Character Area
Gardens and Designed
Ancient Woodland

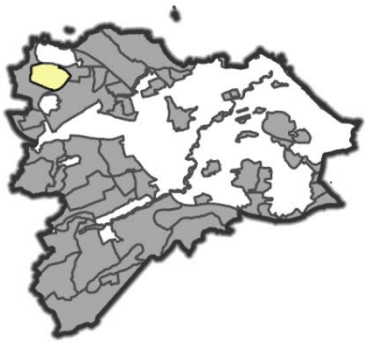
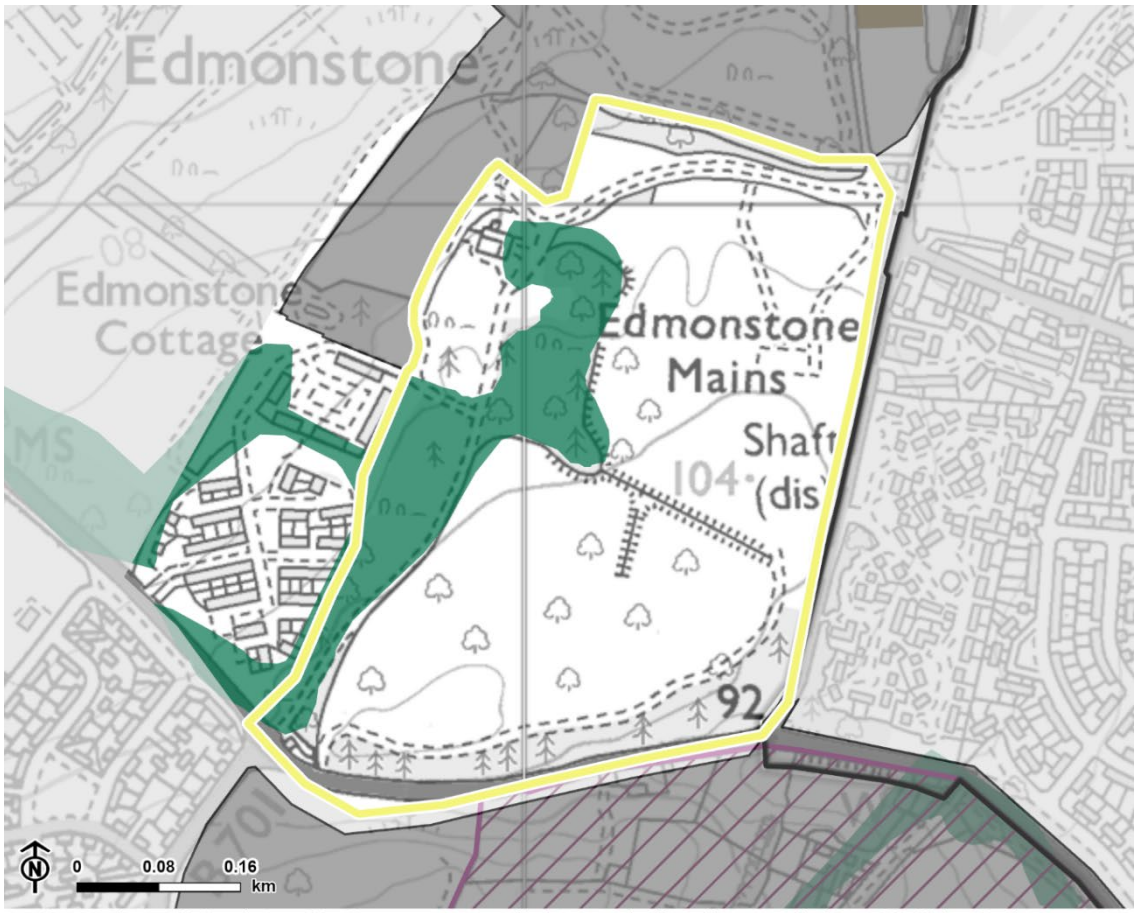
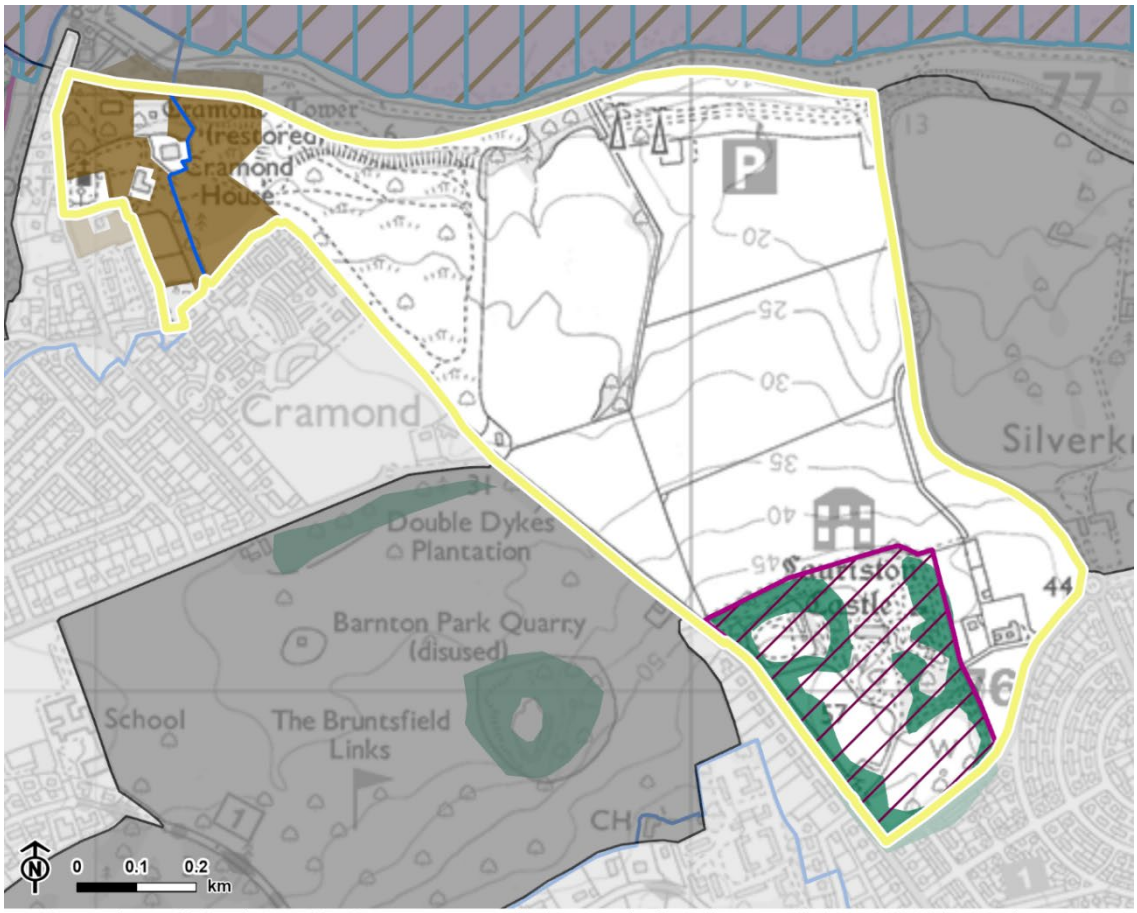


Figure B.22: Edmonstone Policies LCA



Policy Landscape: Edmonstone Policies
City of Edinburgh boundary
Neighbouring Landscape Character Area
Gardens and Designed
Scheduled monument
Ancient Woodland

Figure B.23: Lauriston Policies LCA



Policy Landscape: Lauriston Policies

Neighbouring Landscape Character Area

Conservation area

Special Protection Area

Gardens and Designed

Ramsar site

Scheduled monument

Site of Special Scientific Interest

Ancient Woodland

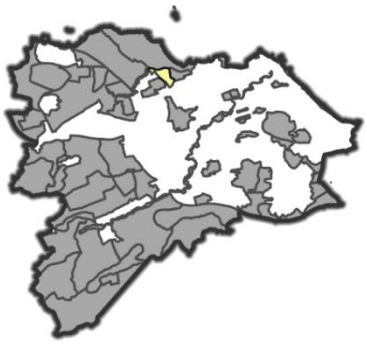
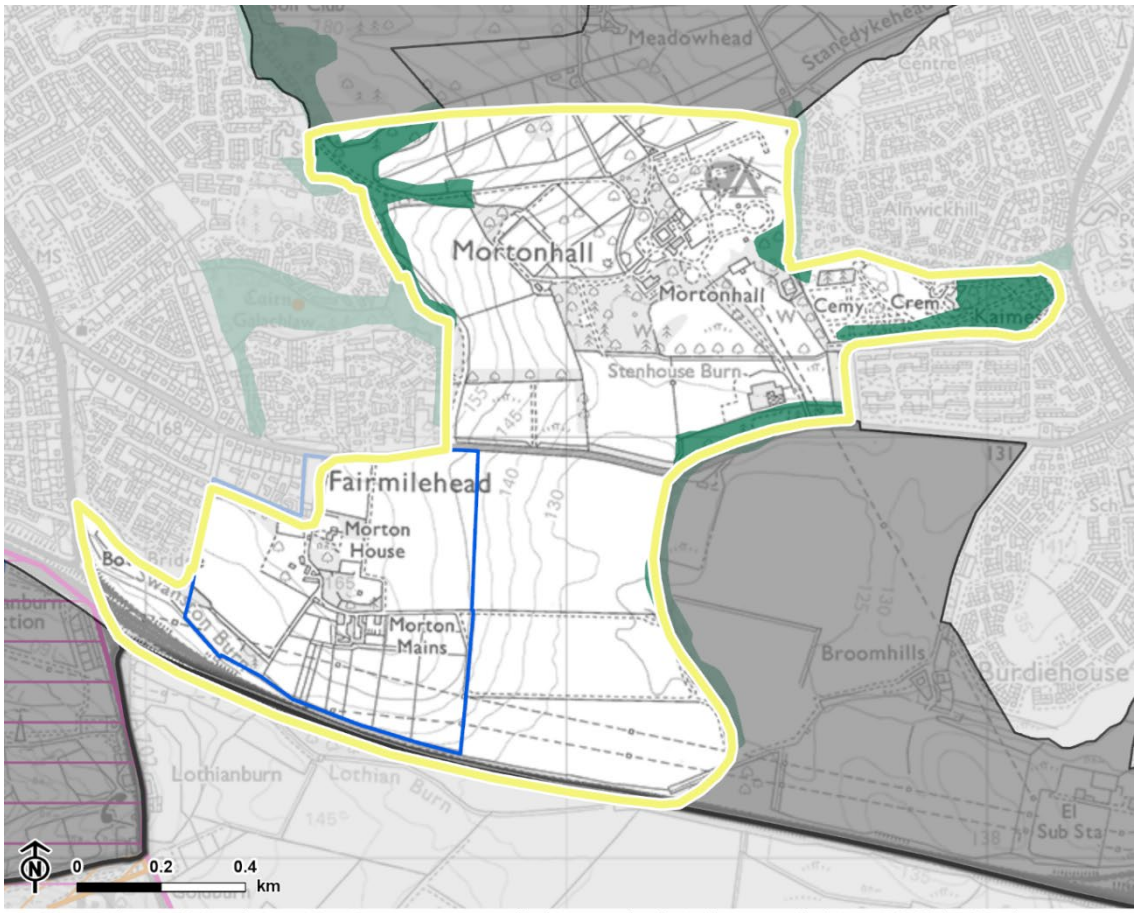
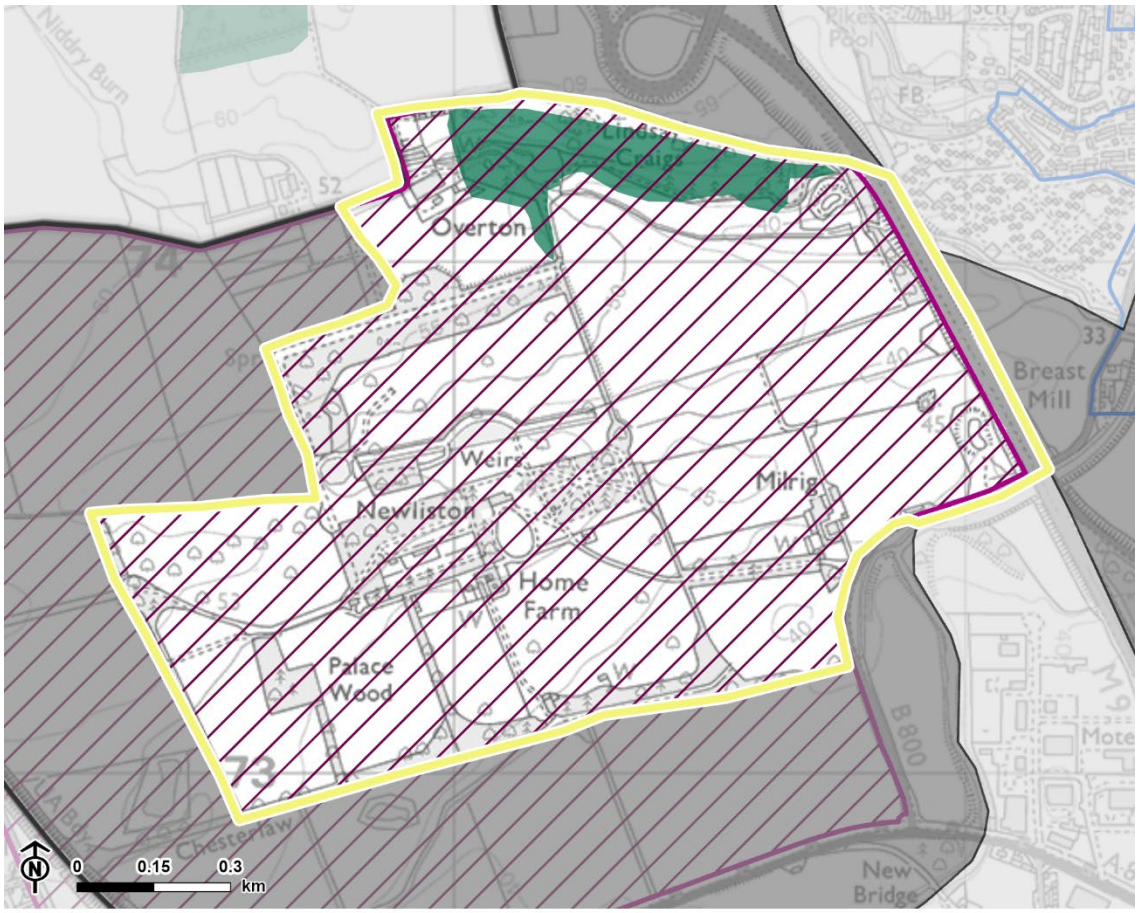


Figure B.24: Mortonhall Policies LCA

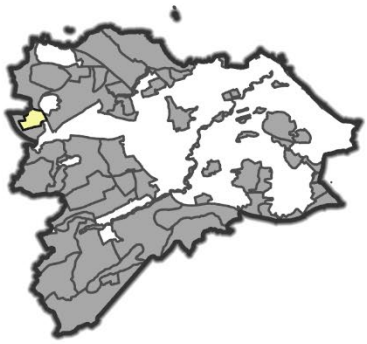


Policy Landscape: Mortonhall Policies
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Regional Park
Country Park
Scheduled monument
Ancient Woodland

Figure B.25: Newliston Policies LCA

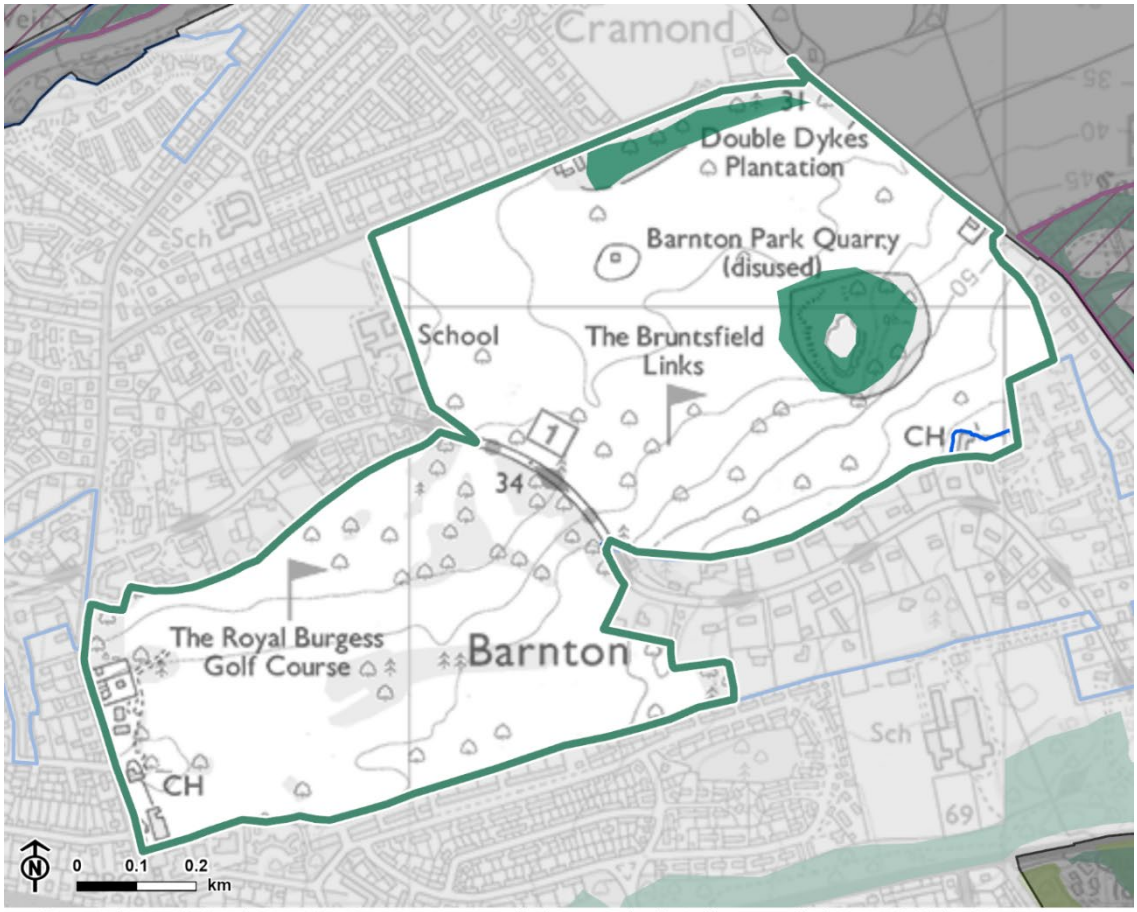


Policy Landscape: Newliston Policies
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Gardens and Designed
Ancient Woodland



Recreational Open Space LCT

Figure B.26: Barnton Golf Courses LCA



Recreational Open Space: Barnton Golf Courses

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Ancient Woodland

Local Nature Reserve

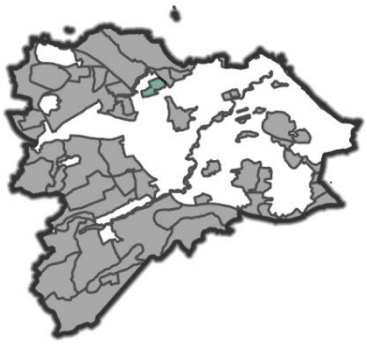
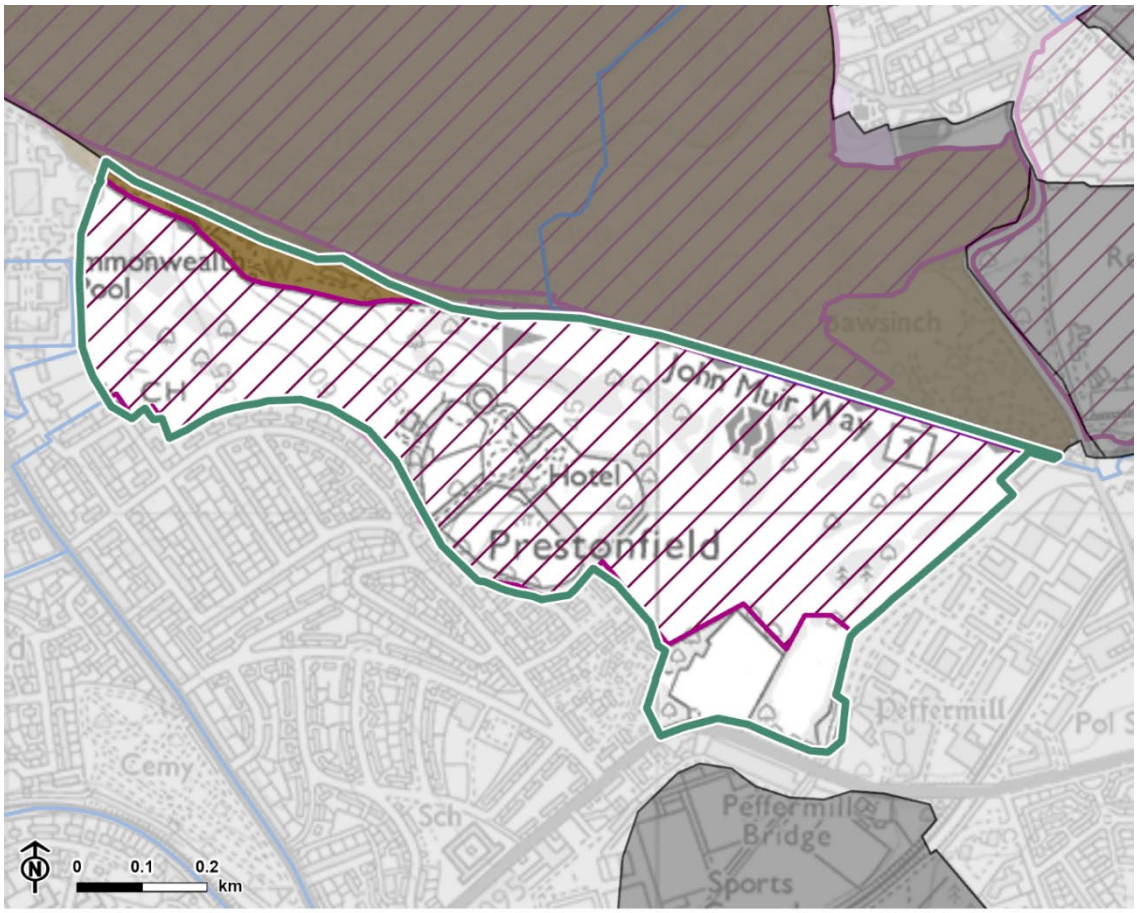


Figure B.27: Prestonfield Golf Course LCA



Recreational Open Space: Prestonfield Golf Course

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Site of Special Scientific Interest

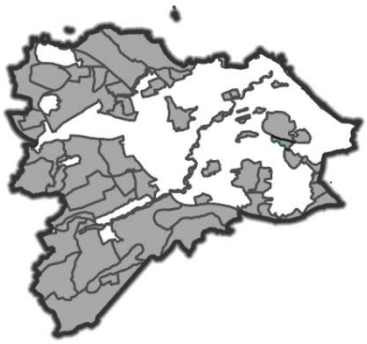
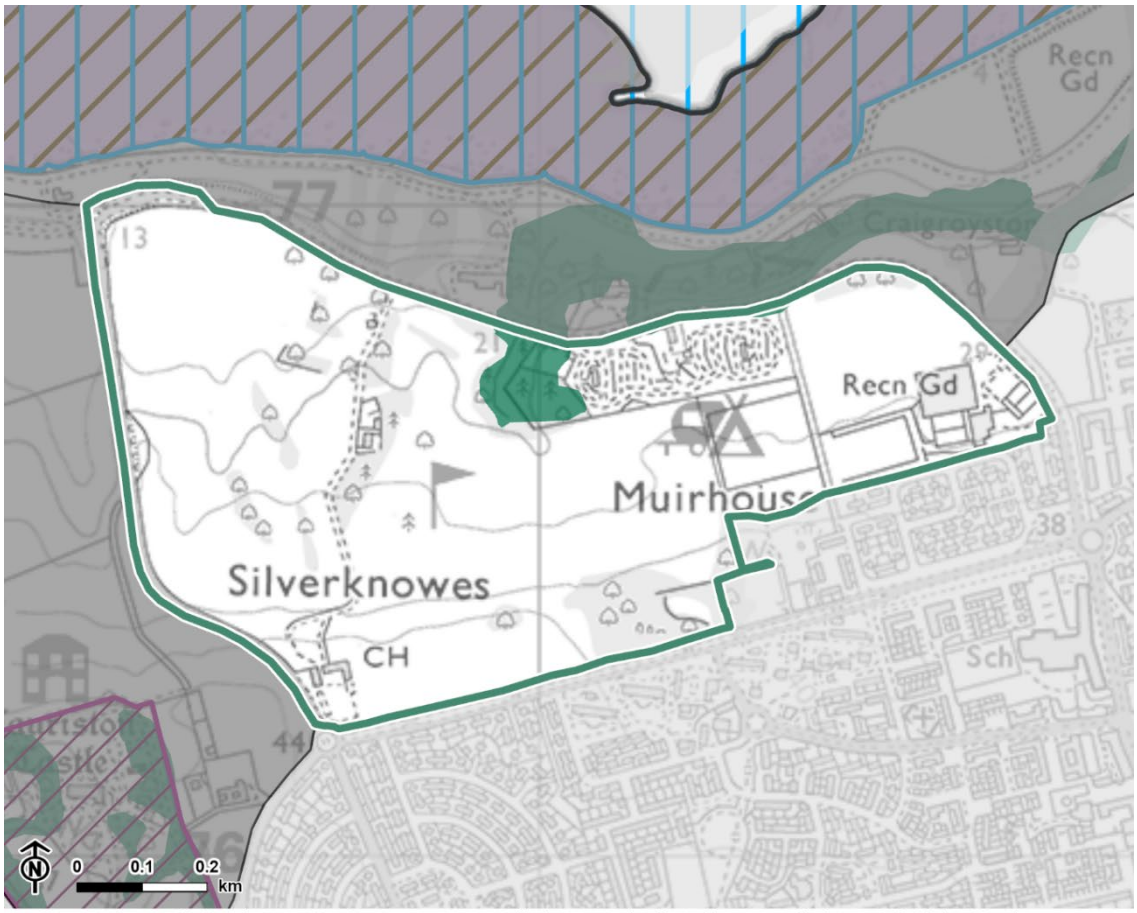


Figure B.28: Silverknowes Golf Course LCA



Contains OS data © Crown copyright and database rights 2025. Ordnance Survey AC0000849421.

Recreational Open Space: Silverknowes Golf Course

City of Edinburgh boundary

Neighbouring Landscape Character Area

Special Protection Area

Gardens and Designed

Ramsar site

Site of Special Scientific Interest

Ancient Woodland

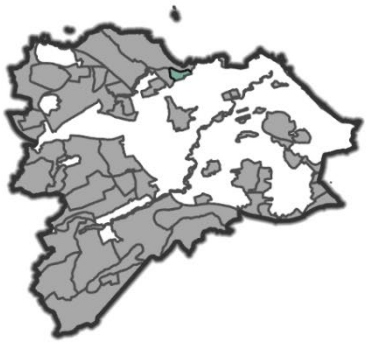
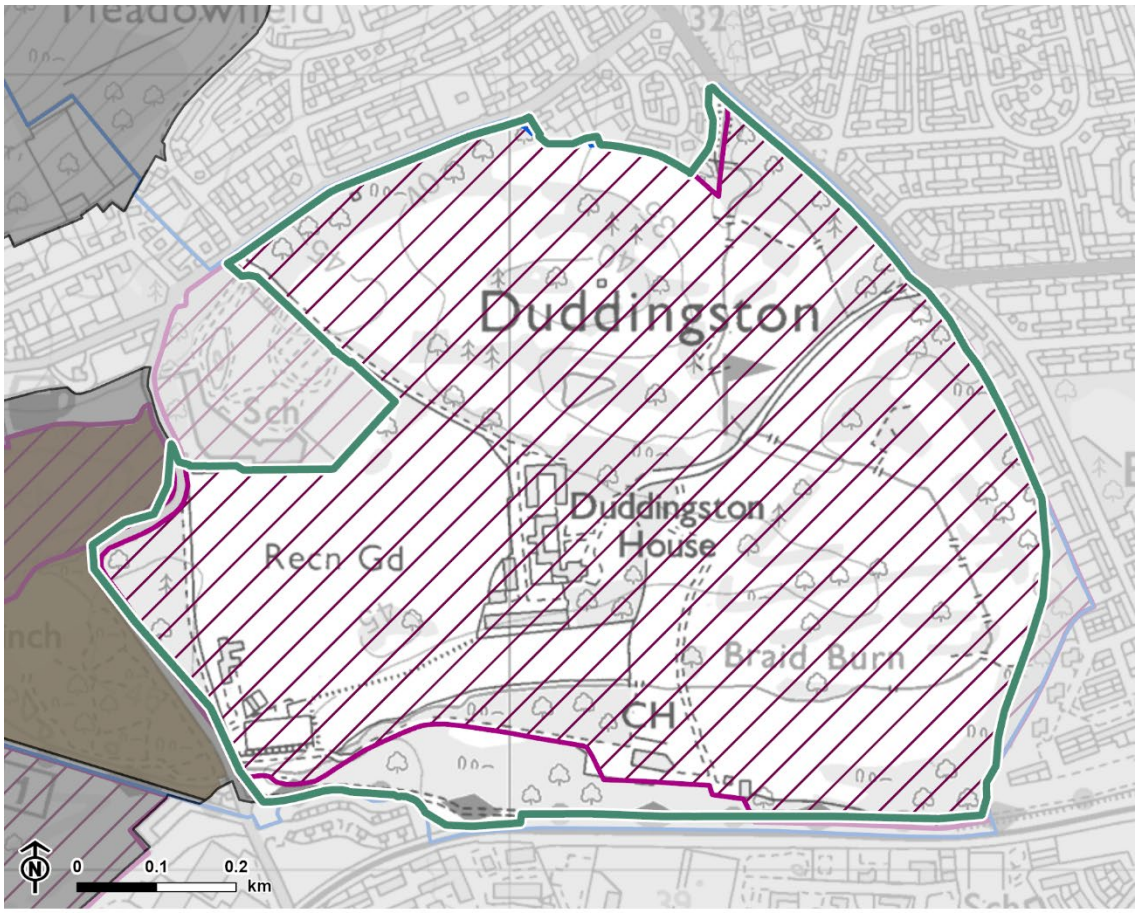


Figure B.29: Duddingston Golf Course LCA



Recreational Open Space: Duddingston Golf Course

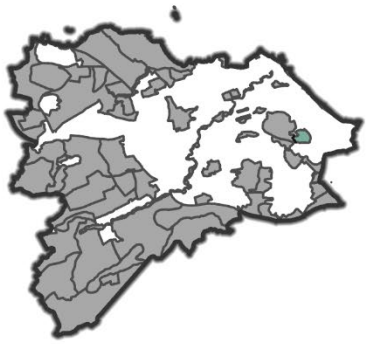
Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

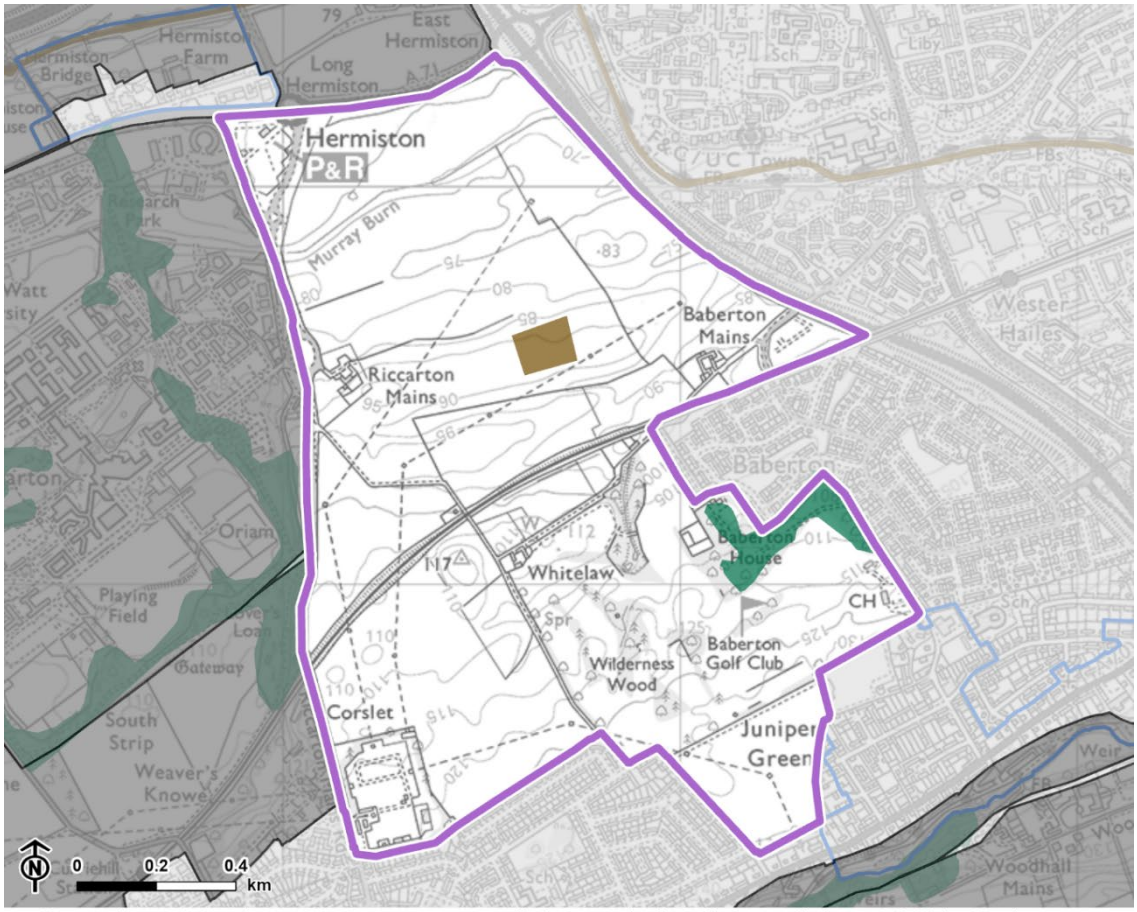
Scheduled monument

Site of Special Scientific Interest



Rolling Farmland LCT

Figure B.30: Baberton Farmland LCA



Rolling Farmland: Baberton Farmland

Neighbouring Landscape Character Area

Conservation area

Scheduled monument

Ancient Woodland

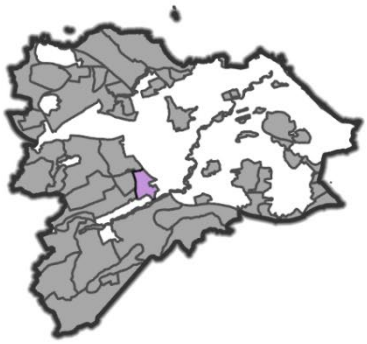
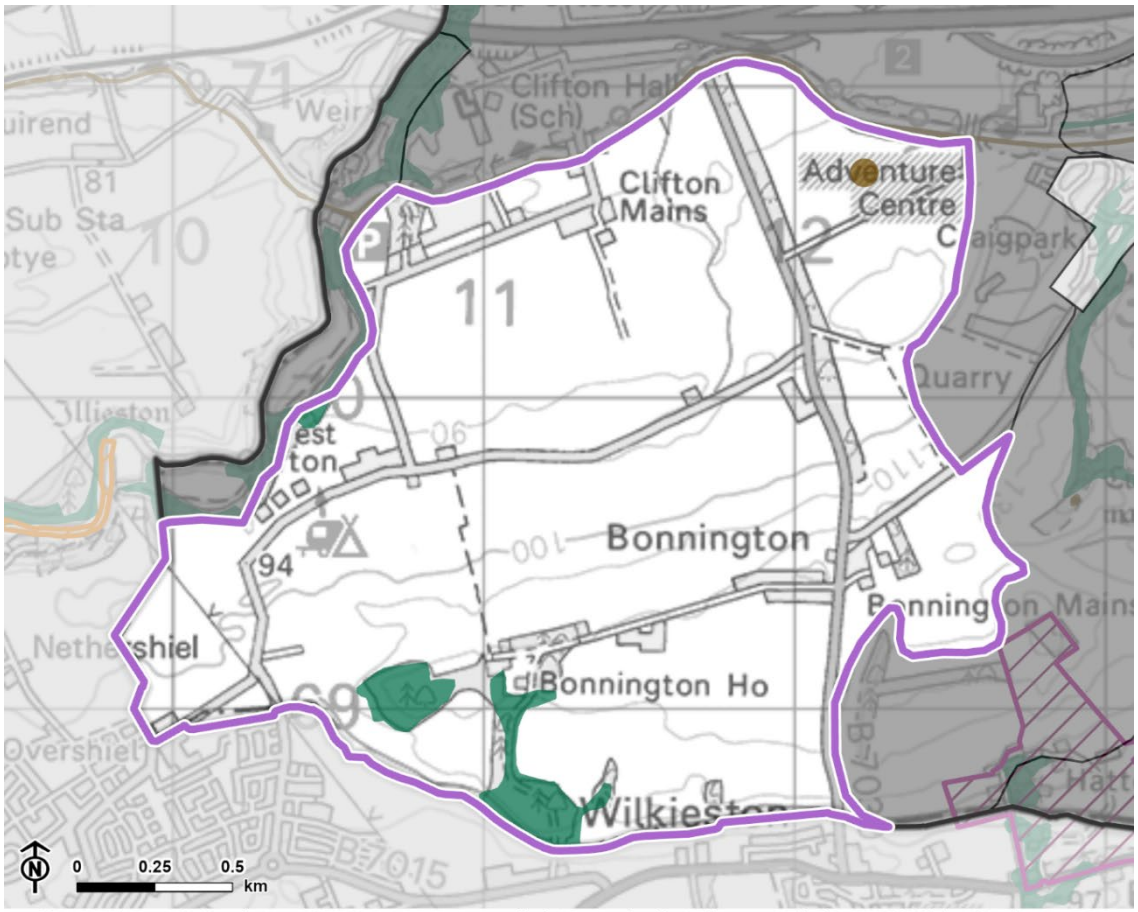


Figure B.31: Bonnington Farmland LCA



Contains OS data © Crown copyright and database rights 2025. Ordnance Survey AC0000849421.

Rolling Farmland: Bonnington Farmland
City of Edinburgh boundary
Neighbouring Landscape Character Area
Gardens and Designed
Country Park
Scheduled monument
Ancient Woodland

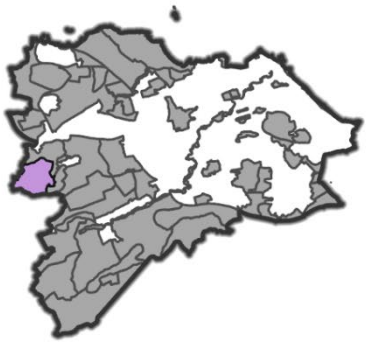
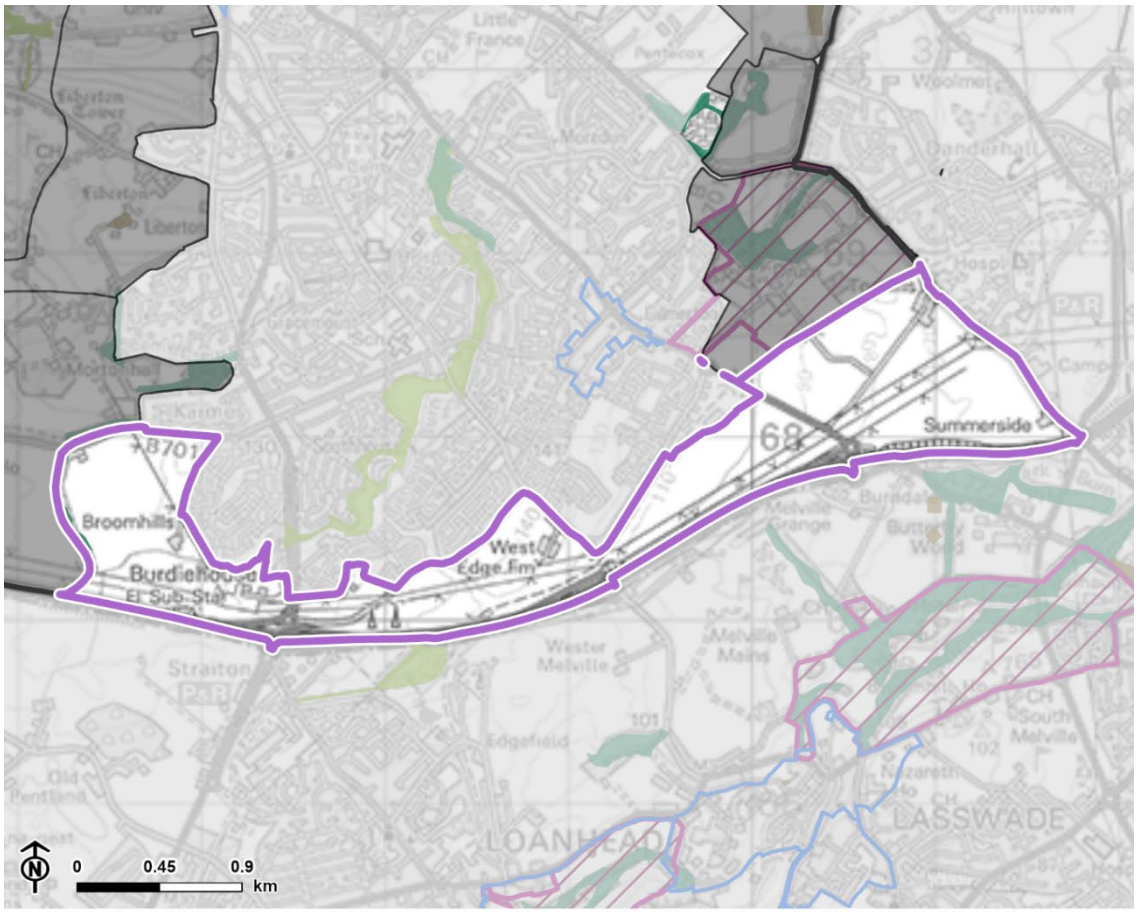


Figure B.32: Burdiehouse Farmland LCA



Rolling Farmland: Burdiehouse Farmland
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Gardens and Designed
Scheduled monument
Site of Special Scientific Interest
Ancient Woodland
Local Nature Reserve

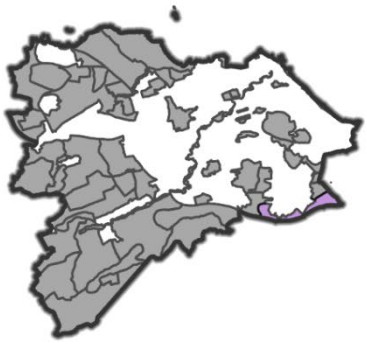
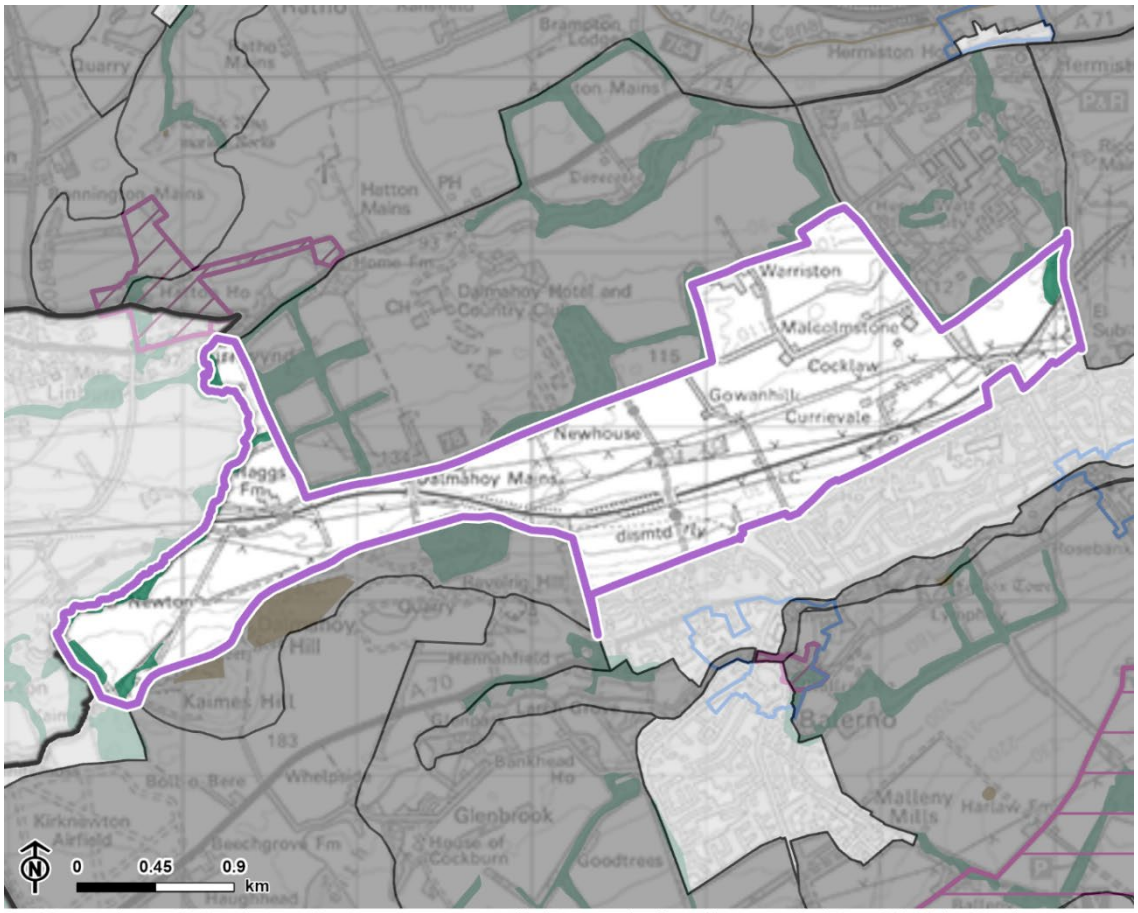


Figure B.33: Gowanhill Farmland LCA



Rolling Farmland: Gowanhill Farmland

City of Edinburgh boundary

Neighbouring Landscape Character Area

Conservation area

Regional Park

Gardens and Designed

Scheduled monument

Ancient Woodland

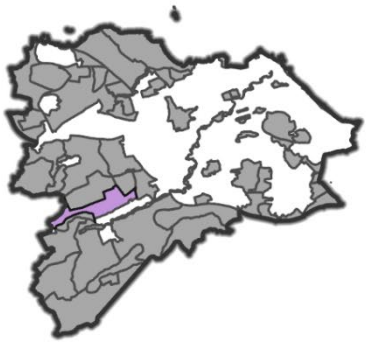
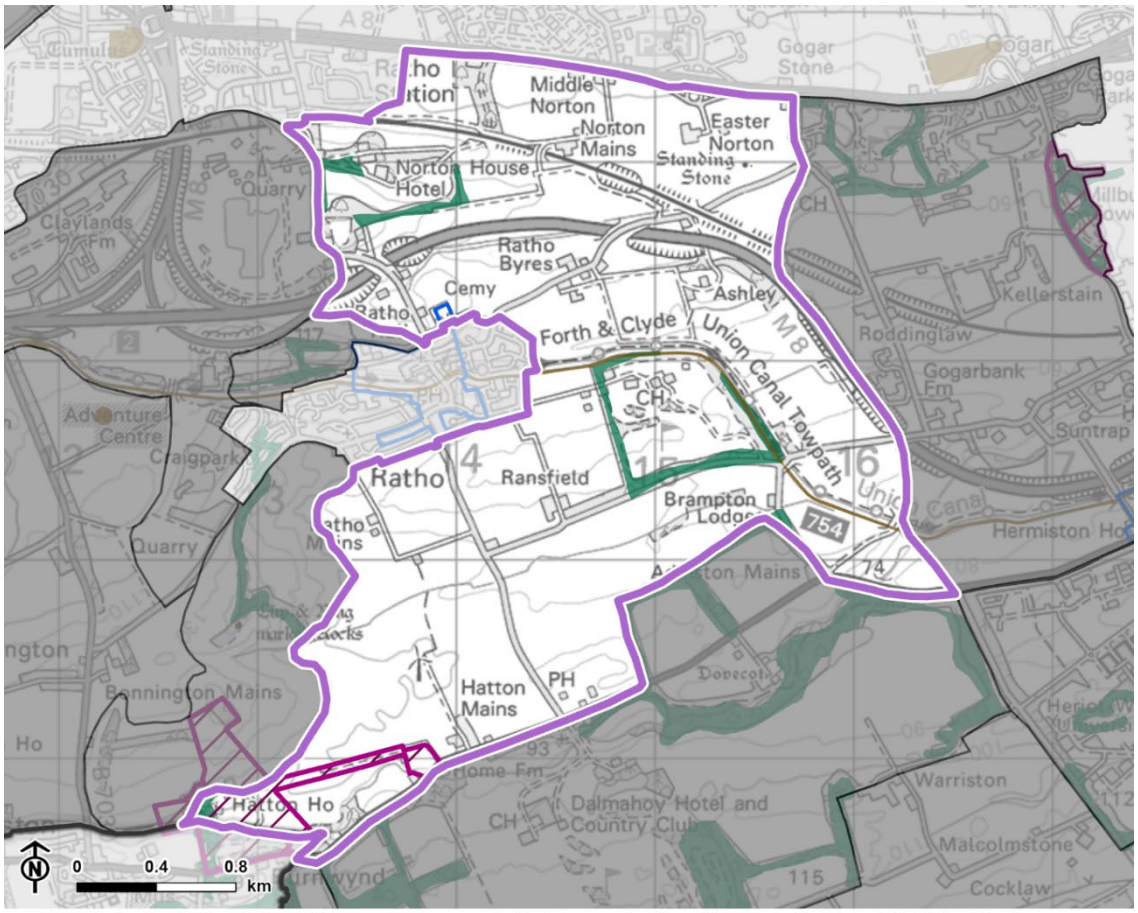
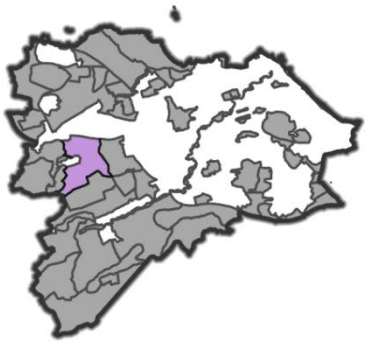


Figure B.34: Ratho Farmland LCA

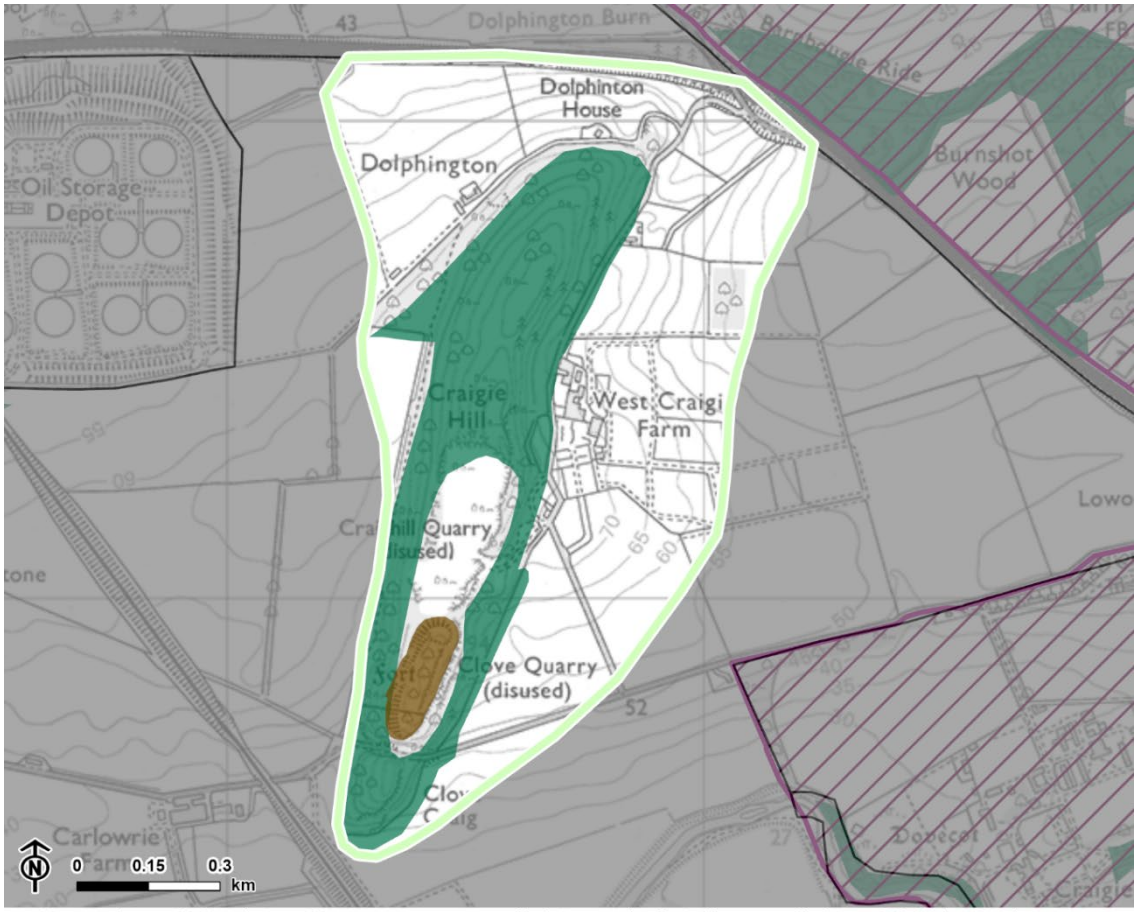


- Rolling Farmland: Ratho Farmland
- City of Edinburgh boundary
- Neighbouring Landscape Character Area
- Conservation area
- Gardens and Designed
- Scheduled monument
- Ancient Woodland



Rural Outcrop Hills LCT

Figure B.35: Craigie Hill LCA



Rural Outcrop Hills: Craigie Hill

Neighbouring Landscape Character Area

Gardens and Designed

Scheduled monument

Ancient Woodland

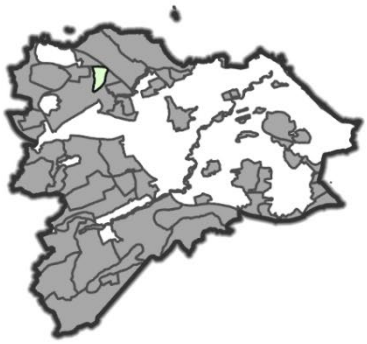
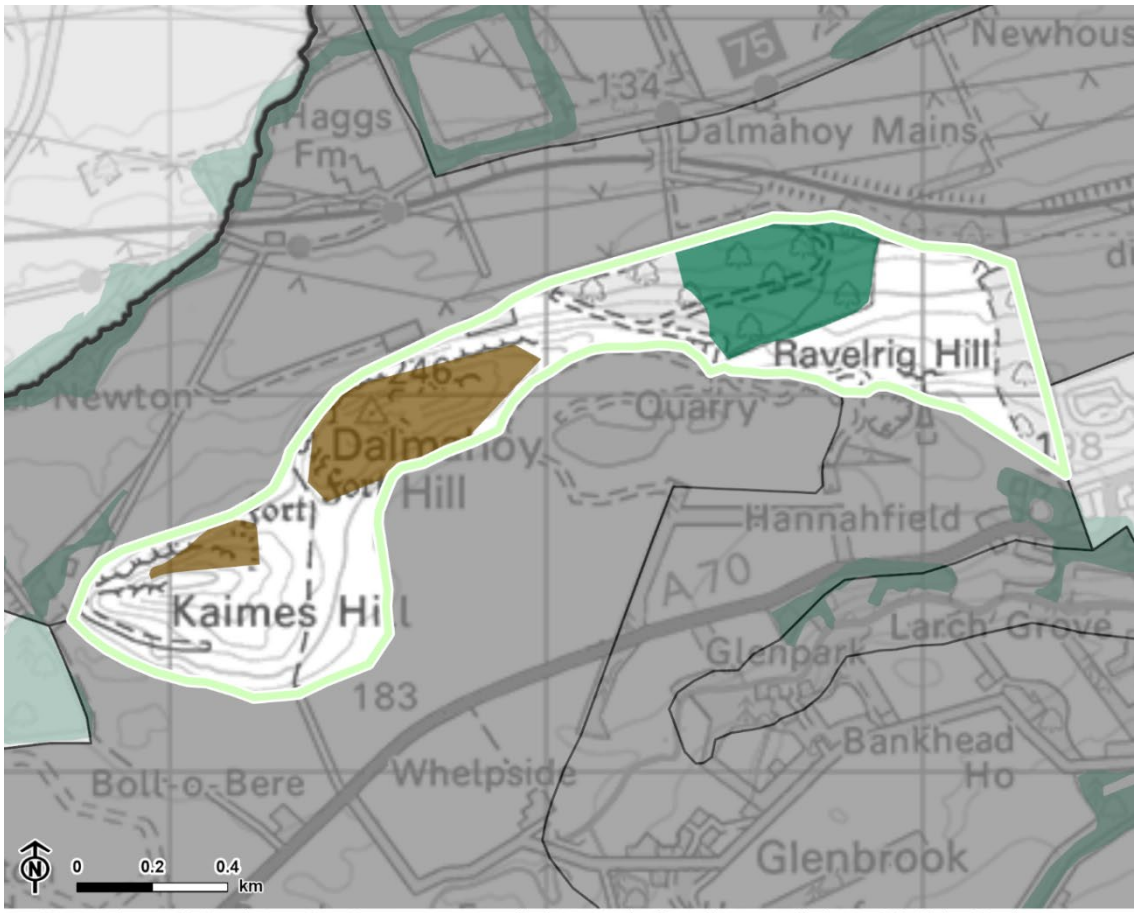


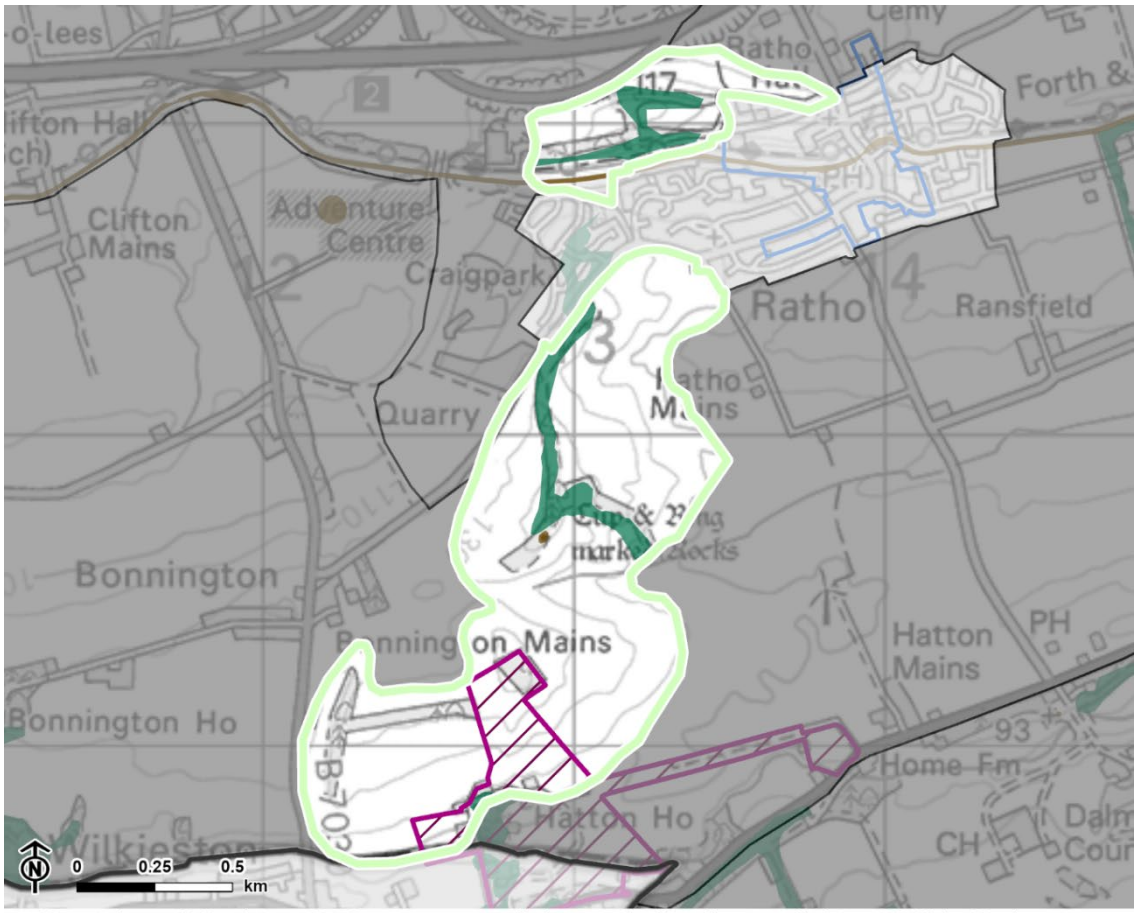
Figure B.36: Kaimes Hill LCA



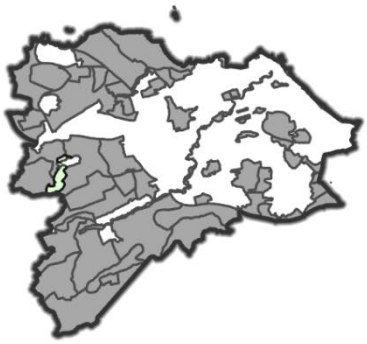
Contains OS data © Crown copyright and database rights 2025. Ordnance Survey AC0000849421.

Rural Outcrop Hills: Kaimes Hill
City of Edinburgh boundary
Neighbouring Landscape Character Area
Scheduled monument
Ancient Woodland

Figure B.37: Ratho Hills LCA



Rural Outcrop Hills: Ratho Hills
City of Edinburgh boundary
Neighbouring Landscape Character Area
Conservation area
Gardens and Designed
Scheduled monument
Ancient Woodland



Settled Farmland LCT

Figure B.38: Craigpark Fragmented Farmland LCA

Settled Farmland: Craigpark Fragmented Farmland

City of Edinburgh boundary

Neighbouring Landscape Character Area

Conservation area

Scheduled monument

Ancient Woodland

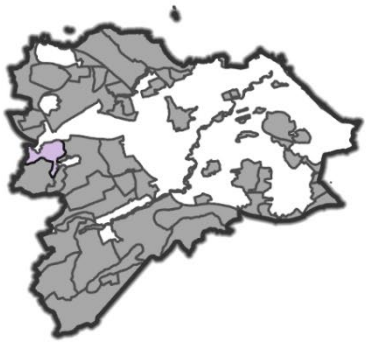
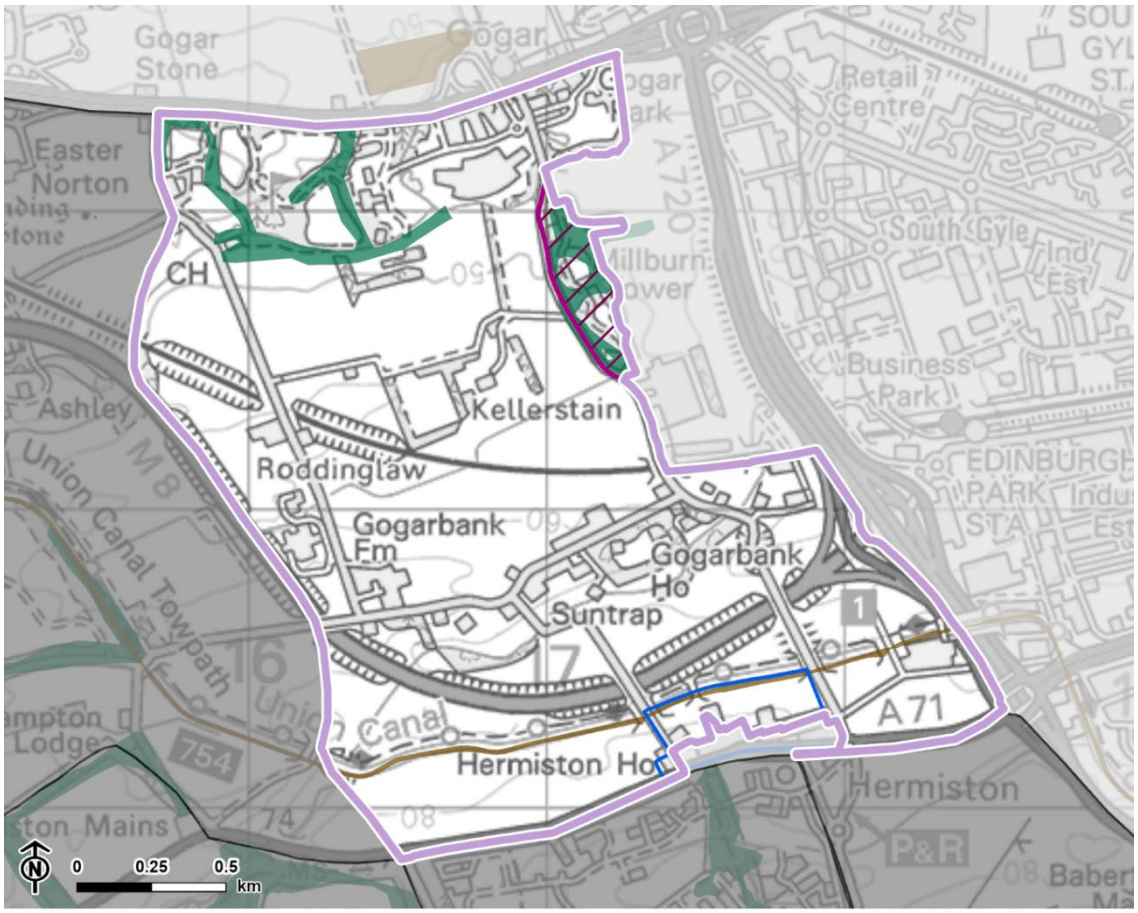


Figure B.39: Gogar Farmland LCA



Settled Farmland: Gogar Farmland

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Scheduled monument

Ancient Woodland

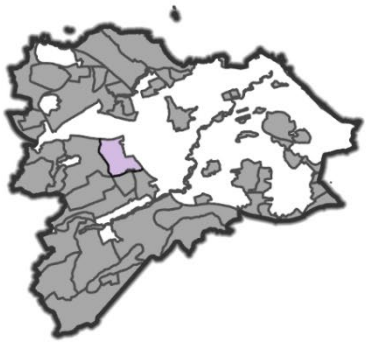


Figure B.40: Liberton Fringes LCA

Settled Farmland: Liberton Fringes

Neighbouring Landscape Character Area

Conservation area

Scheduled monument

Site of Special Scientific Interest

Ancient Woodland

Local Nature Reserve

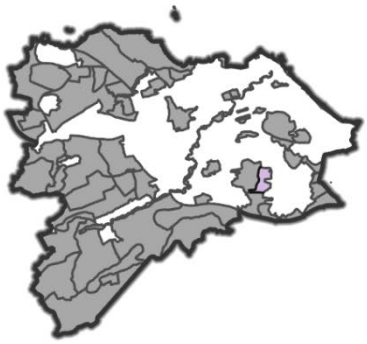
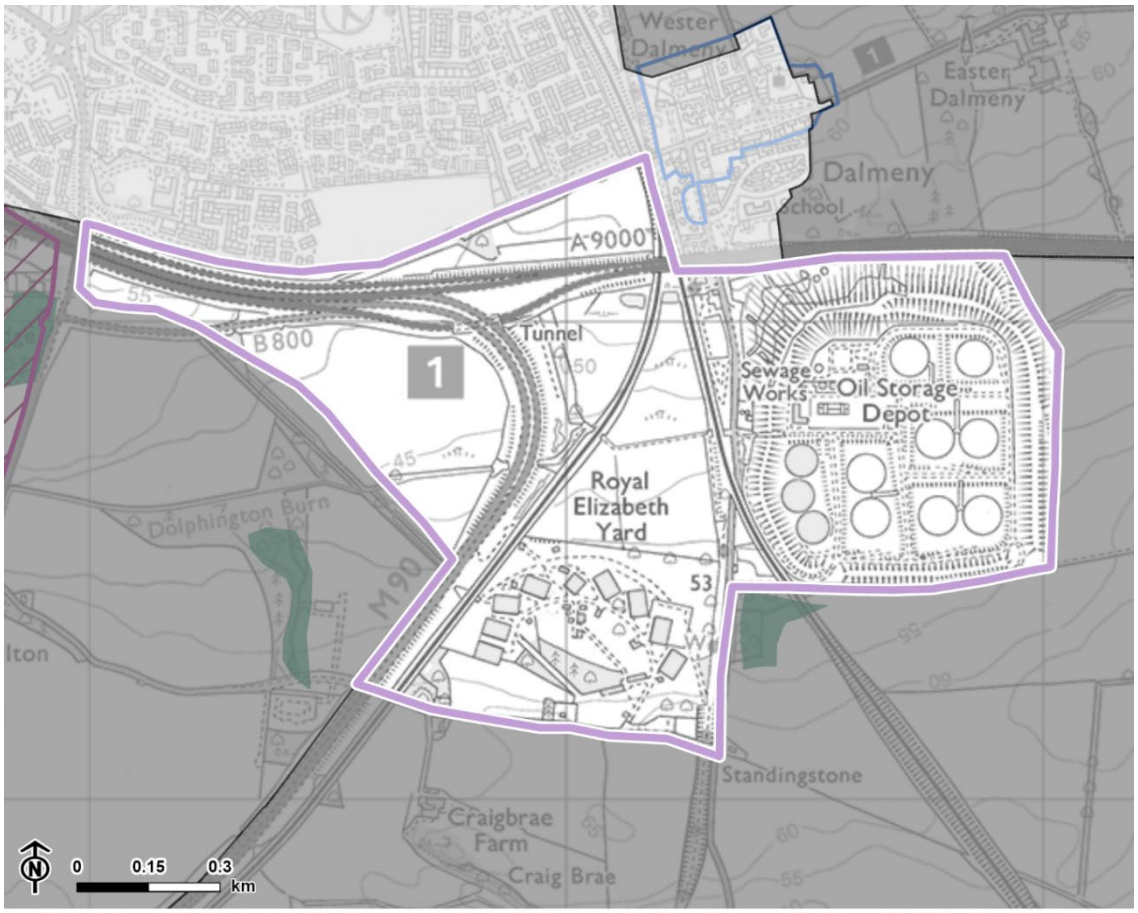


Figure B.41: Queensferry Fragmented Farmland LCA



Settled Farmland: Queensferry Fragmented Farmland

Neighbouring Landscape Character Area

Conservation area

Gardens and Designed

Ancient Woodland

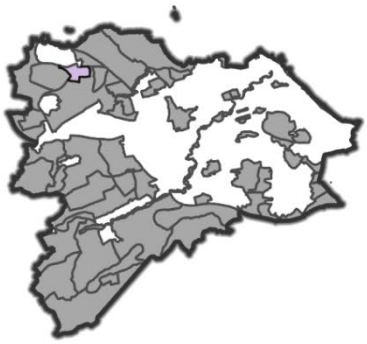
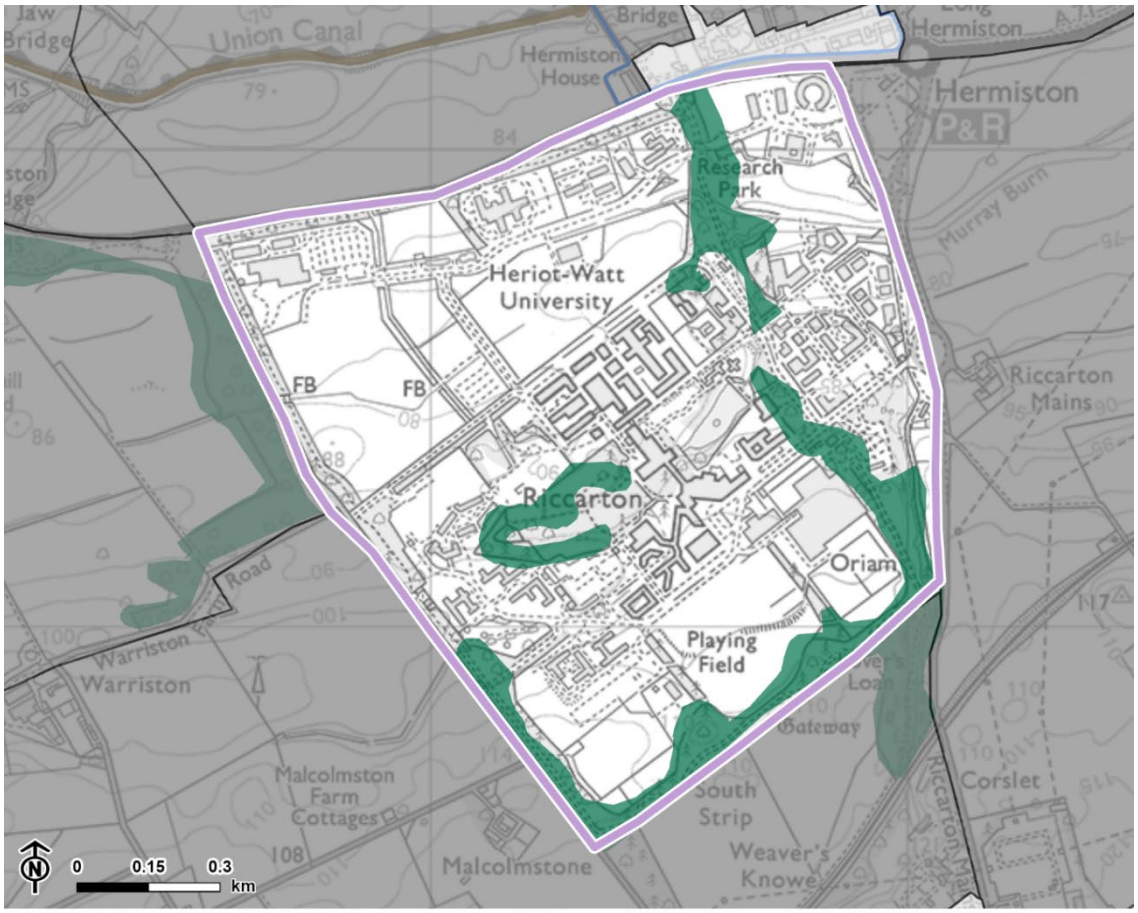


Figure B.42: Riccarton Campus LCA



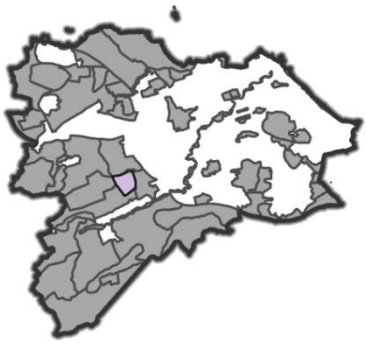
Settled Farmland: Riccarton Campus

Neighbouring Landscape Character Area

Conservation area

Scheduled monument

Ancient Woodland



Appendix C
Glossary

Table C.1: Glossary of terms and abbreviations

Term	Definition
AOD	Above Ordnance Datum (sea level).
Ancient Woodland	Woodland evidenced to have had continuous woodland cover since at least 1750 AD and has only been cleared for underwood or timber production. It is an extremely valuable ecological resource, with an exceptionally high diversity of flora and fauna.
Arable	Land used for growing crops.
Avenue	A tree-lined way or approach.
BESS	Battery energy storage system.
Biodiversity	The measure of the variety of organisms present in different ecosystems.
Blade tip height	Measurement of a wind turbine extending from the lowest point on the base of the turbine, to the highest point on the turbine blade.
Brownfield	Previously developed land, typically in an underused or abandoned condition.
Cleugh	Steep valley or ravine.
Conservation Area	A designated area of special architectural or historic interest.
Core Path	Part of a system of paths or routes, including waterways, designated by the local planning authority to facilitate access rights under the Land Reform (Scotland) Act 2003.
GDL	Grounds which have been laid out for artistic effect designated on the Inventory of Gardens and Designed Landscapes in Scotland.
Landscape character	A distinct pattern or combination of elements that occurs consistently in a particular landscape.
Landscape character area (LCA)	A unique geographic area with a consistent character and identity, which forms part of a landscape character type.
Landscape character type (LCT)	A generic term for landscape with a consistent, homogeneous character. Landscape character types may occur in different parts of the county, but wherever they occur, they will share common

Term	Definition
	combinations of geology, topography, vegetation, or human influences.
Listed building	A building, object or structure that has been judged to be of national importance in terms of architectural or historic interest.
LLA	Local Landscape Areas: areas of the landscape that are locally designated for their high value and distinctiveness.
LSA	Landscape Sensitivity Assessment
LVIA	Landscape and Visual Impact Assessment
NCN	National Cycle Network.
Parkland	Land that has historically been managed for grazing, with open grassland and old, open-grown trees.
Pastoral	Land used for the grazing of animals.
Policies/Policy landscape	Enclosed ornamental grounds, forming part of a historic estate in which a large country house is situated.
PRoW	Public Right of Way.
Riparian	Relating to the wetlands and banks adjacent to rivers and streams.
Scheduled Monument	Nationally important archaeological sites or historic buildings, given protection against unauthorised change.
Shelterbelt	A line of trees or shrubs planted to provide a windbreak.
Solar PV	Solar photovoltaic.
SPA	Special Protection Area (EC Directive 2009/147/EC on the Conservation of Wild Birds).
Specimen tree	Typically a large tree which forms a focal point in the landscape.
SSSI	Site of Special Scientific Interest.
Time depth	The time period expressed in the landscape, or the extent to which the landscape reflects a certain time period (a landscape with greater time depth will comprise older elements than a landscape with lesser time depth).
Topography	Combinations of slope and elevation that produce the shape and form of the land surface.

Appendix D
GIS Data Sources

Table D.1: GIS data sources

Category	Name	Source
Mapping	Aerial Imagery	ESRI
Mapping	Topography	ESRI
Mapping	OS 25k	City of Edinburgh Council
Mapping	OS 50k	City of Edinburgh Council
Administrative boundaries	Local authority boundary	OS boundary line
Landscape character and designated landscapes	National Landscape Character Assessment	NatureScot
Landscape character and designated landscapes	Edinburgh 2010 Landscape Character Assessment	City of Edinburgh Council
Landscape character and designated landscapes	Edinburgh 2026 Landscape Character Assessment	LUC
Landscape character and designated landscapes	Edinburgh 2010 Local Landscape Areas	City of Edinburgh Council
Landscape character and designated landscapes	Edinburgh 2026 Local Landscape Areas	LUC
Landscape character and designated landscapes	Local Landscape Areas (national dataset)	Scottish Government Open Data
Natural heritage	SPA	NatureScot
Natural heritage	SSSI	NatureScot
Natural heritage	LNR	NatureScot
Natural heritage	Ancient woodland inventory	NatureScot
Historic environment	Listed Buildings	Historic Environment Scotland
Historic environment	Scheduled Monuments	Historic Environment Scotland
Historic environment	Gardens and Designed Landscapes	Historic Environment Scotland

Category	Name	Source
Historic environment	World Heritage Sites	Historic Environment Scotland
Historic environment	Conservation Areas	City of Edinburgh Council
Access and recreation	National Cycle Network	Sustrans
Access and recreation	Core Paths	City of Edinburgh Council
Planning	Settlement boundaries (urban area)	City of Edinburgh Council

Appendix E
User Guide

E.1 The following list should be consulted to help the user employ appropriate information for the development of renewable energy proposals or supporting the assessment and appraisal of associated planning applications.

1. What type of change is proposed?
2. To which Landscape Character Type (LCT) does the proposal relate (refer to Figure 2.1)? If a proposal is close to the edge of two or more LCTs, all relevant profiles within this assessment will need to be consulted.
3. To what degree does the site reflect the typical sensitivities identified in the sensitivity criteria (e.g. Landform and scale, Land cover and scale, Historic landscape character, Visual receptors, Visual character, and Perceptual and scenic qualities) for the LCT in question? Which of these sensitivities will be affected by the proposal, and how?
4. Does the assessment text identify any areas of higher or lower sensitivity that may be applicable to the proposal?
5. To which Landscape Character Area (LCA) does the proposal relate (refer to the Edinburgh Landscape Character Assessment (2026)). Will the proposal affect any of the key sensitive features and characteristics identified for the LCA?
6. Are there any specific site opportunities for mitigation (including those identified in relevant LCT evidence within the Edinburgh Landscape Character Assessment (2026) and Chapter 3)?

Guidance on undertaking Landscape and Visual Impact Assessment (LVIA)

Overall need/purpose

E.2 A landscape and visual impact assessment (LVIA) is a key part of assessing the effect of proposed wind energy, solar PV or BESS developments, including as part of the EIA process. An EIA may not be required for all developments; however, it is likely that a landscape and visual impact assessment or appraisal (LVIA) will be required to accompany the planning application. The level of detail required will

depend upon the sensitivity of the site and the nature of the proposal and its potential effects. Pre-application discussions with the City of Edinburgh Council are strongly recommended for all wind energy, solar PV and BESS applications. This will provide an opportunity to agree the scope, level of detail and presentation of the LVIA, and ensure that it is based on accurate and up-to-date information. The LVIA should address the key landscape issues raised by the proposals, providing information that is relevant, necessary and material to the decisions to be made.

E.3 General guidance on LVIA is provided in the Landscape Institute and Institute of Environmental Management and Assessment's 2013 Guidelines for Landscape and Visual Impact Assessment – 3rd Edition (GLVIA3). Guidance relevant to the assessment of cumulative landscape and visual effects resulting from wind energy developments is provided by NatureScot's 2021 Guidance – Assessing the cumulative landscape and visual impact of onshore wind energy developments.

E.4 The following guidance sets out the type of information that should be expected to be submitted as part of an LVIA for a wind energy, solar PV or BESS development in the City of Edinburgh Council area. In addition, LVIAs for EIA developments should comply with the scoping opinion given by the planning authority, where this has been sought.

E.5 The following section sets out the required components of an LVIA, in terms of information required to submit along with a planning application.

Project description

E.6 The planning application should include a description of the project at each phase in its life cycle in sufficient detail to allow the assessment of landscape and visual effects including:

- The location, layout, orientation and dimensions or extent of all wind turbines, solar PV arrays or BESS containers, on-site access tracks, hardstandings, and associated plant and structures (including plans, elevations and sections), permanent or temporary;
- A description of the scale and duration of project activities during construction, operation, and decommissioning (including method of construction and traffic generation);
- Information on site access including routes for transport of renewables infrastructure, including any need for removal of landscape features;
- Location and size of temporary lay down areas, construction compounds, materials storage, temporary fencing, foundations and site cable runs;

- Excavation/levelling details and soil removal estimates (if applicable);
- Plans for site reinstatement;
- Details of any tracking or moving mechanisms;
- Location and appearance of any signage, security features, lighting, fencing and onsite and offsite grid connection points (substation/switchgear cabinet);
- Plans for landscape mitigation measures and/or landscape enhancement; and
- Plans for decommissioning (removal of infrastructure and ancillary structures, proposals for restoration and future land management).

E.7 The LVIA should highlight those aspects of the development that are the key sources of landscape and visual change.

Baseline studies

E.8 The baseline studies should set out the existing conditions within the study area. The study area should be agreed with the planning authority, and should reflect the total area for which significant landscape and visual effects (including cumulative effects) may be anticipated. The extent of the study area will reflect the scale of development proposed and the nature of landform and land cover of the surrounding landscape, which may provide screening or otherwise limit visibility of the proposal. NatureScot's 2017 Visual Representation of Wind Farms Guidance provides further guidance on the selection of a study area for wind energy development.

E.9 Information on land use, landscape features, landscape character and landscape designations should be provided, drawing on the Landscape Character Assessment. A field survey should be undertaken to supplement desk based information.

E.10 The landscape baseline should be evaluated in accordance with the principles of GLVIA3.

E.11 A zone of theoretical visibility (ZTV) should be prepared to indicate the area over which the renewable energy development may be seen. These should consider all components of the renewable energy development e.g. wind turbines, solar PV panels, BESS containers and associated infrastructure such as substations. ZTVs should be used, alongside fieldwork, to identify representative assessment viewpoints. These viewpoints should be discussed and agreed with the planning authority and other stakeholders. The number of viewpoints required will vary depending on the size of the development and sensitivity of the location. Priority should be given to views from sensitive locations (e.g. residential areas, areas

popular with visitors or for outdoor recreation where views may be focused on the landscape and recognised/iconic views). If the development is visible from a protected landscape, which may include Local Landscape Areas or areas of the landscape designated for their contributions to the historic environment, there will be a requirement for at least one viewpoint from that landscape. The purpose for selection should be recorded within the LVIA.

Mitigation

E.12 As a result of the iterative assessment process, there are likely to be modifications to the scheme design to minimise landscape and visual effects, particularly for larger schemes. In addition, there may be measures to prevent, reduce or offset significant adverse effects. These should be described in terms of relationship to/conservation of valued landscape features, relationship to landscape character (particularly topography, scale, landform and landscape pattern), and appearance in views experienced by sensitive receptors and from designated landscapes. All mitigation measures should be described and an indication of how they will be implemented should be provided. Mitigation itself may have an impact on the landscape character, for example, new shelterbelt screening for a solar PV development could interrupt important long-distance views.

E.13 A description of the main reasons for site selection and any alternatives in site design or layout should also be provided.

Enhancement

E.14 Landscape enhancement aims to improve the character and quality of the landscape beyond the baseline condition, and is therefore additional to mitigation. It may take many forms, including improved land management or creation of new landscape features. Landscape enhancement, as part of a proposal, will be looked upon favourably.

Description of effects

E.15 This section should systematically identify and describe the likely effects of the proposal, identifying the magnitude of change to baseline conditions resulting from the proposal. Methods should be clearly set out. The assessment should cover effects at construction, operational and decommissioning phases and should consider direct, indirect, secondary, short, medium and long term effects. Effects on

landscape features/fabric, landscape character, landscape values and visual amenity should be assessed.

- Effects on landscape features/fabric should consider loss of elements (e.g. hedges, trees).
- Effects on landscape character should describe the direct changes that will occur to the character of the specific part of the landscape in which the proposal is located and the indirect changes to character of the other parts of the landscape from where the development will be visible – this should include how the renewable energy development will affect perceptions of character and how widespread and prominent the changes will be.
- Effects on the key sensitivities and valued features of the landscape (as recorded in the Landscape Character Assessment) and special landscape qualities (as recorded in the Local Landscape Area Statements of Significance) should be described. The assessment of effects on the special landscape qualities of LLAs should be undertaken in accordance with NatureScot's 2025 Special Landscape Qualities – Guidance on assessing effects. Whilst this guidance is focused on the assessment of effects on the special landscape qualities of National Parks and National Scenic Areas, a similar (albeit proportionate) approach should be taken to the assessment of effects on locally designated landscapes.
- Effects on visual amenity should describe and illustrate the extent of visibility and record changes in views from the representative assessment viewpoints with reference to photographs and visualisations. The assessment needs to ensure that the representative viewpoints and visualisations are used to explain the impact of the scheme on visual receptors (e.g. people travelling on roads or public rights of way) across the whole route, rather than just static points.
- Effects on settlements and individual properties should also be considered, with a separate Residential Visual Amenity Assessment (RVAA) undertaken, where relevant, in accordance with the Landscape Institute's 2018 Technical Guidance Note 2/19: Residential Visual Amenity Assessment (RVAA).

Assessment of significance

E.16 The significance of effects should be assessed by reference to GLVIA3. The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial. Methods should be clearly set out and any assumptions clearly stated. The report should acknowledge that when assessments result in multiple negative

effects, even when these are not classified as significant under EIA regulations, the cumulative effect of these can be significant.

Presentation of the LVIA

E.17 The document should be clear and logical in its layout and presentation. It should be a balanced document providing an unbiased account of the landscape and visual effects, with reasoned and justifiable arguments. A glossary of technical terms and reference list would also be helpful. For EIA development, a non-technical summary should be provided to enable a non-specialist to understand the landscape and visual effects of the proposal – this should include a summary description of the development, the aspects of landscape character and visual amenity likely to be significantly affected, and the mitigation measures to be implemented.

Maps and illustrations to accompany an LVIA

E.18 The number of maps and illustrations may vary according to the sensitivity of the site and type of proposal. An OS base map of sufficient detail should be used to indicate the location and presence of vegetation and public rights of way.

E.19 As a guide, the following illustrations will typically be required as part of an LVIA (see next section for maps and figures required as part of a cumulative assessment):

- A site layout plan showing position of infrastructure, access arrangements, location of any compounds, and all ancillary elements for the development in the context of the physical landscape fabric (this may already form part of the planning application in which case it can be cross-referenced);
- National character areas within the study area;
- Landscape Character Areas/Types within the study area;
- Regional and local landscape designations and recreational routes (National Cycle Network routes, long-distance walking routes, Core Paths, and other public rights of way) within the study area;
- Local landscape or planning designations, recreational routes and Ancient Woodland closer to the site (distance dependent upon scale of development);
- Mapping of Gardens and Designed Landscapes, Conservation Areas, Scheduled Monuments and Listed buildings may also be relevant to the LVIA (this information should also be recorded in the cultural heritage assessment);

- Zone of Theoretical Visibility within the study area or an indication of extent of visibility (including the proportion of the site which will be theoretically visible if possible, and clearly indicating distance radii from the site);
- A map showing viewpoint locations, overlaid onto the Zone of Theoretical Visibility (may be combined with above maps if relevant);
- Zone of Theoretical Visibility overlaid onto Landscape Character Areas/Types and landscape designations (likely to be more than one map); and
- Photographs and photomontages/visualisations for viewpoints to illustrate the location and extent of development in the landscape, provided and reproduced to reflect best practice. Viewpoint locations and type of visualisation will need to be agreed with the Council. Winter views are usually required as outlined in GLVIA3, particularly in parts of the landscape where screening of views by deciduous vegetation varies seasonally.

Assessment of Cumulative Landscape and Visual Effects

Overall need/purpose

E.20 Cumulative assessment as part of Environmental Impact Assessment (EIA) is required under the EU Directive on EIA (EIA Directive 2014/52/EU, which amends EIA Directive 2011/92/EU).

E.21 The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations 2017) require the Environmental Statement to include a description of likely significant effects resulting from *"the cumulation of effects with other existing and, or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources"*.

E.22 The Landscape Institute defines cumulative landscape and visual effects as *"additional changes to landscape and visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it) or actions that have occurred in the past, present or are likely to occur in the foreseeable future"* (GLVIA2). Cumulative effects can trigger the EIA process. Even if EIA is not required, it is likely that an assessment or appraisal of cumulative landscape and visual effects will be required to accompany the planning application.

E.23 The assessment of cumulative landscape and visual effects of wind energy development should be undertaken in accordance with NatureScot guidance.

Differences between cumulative assessment baselines

E.24 Cumulative landscape and visual effects will be considered under the primary assessment within the LVIA, which considers potential for effects resulting from the introduction of the proposal with other wind energy, solar PV and BESS developments that are operational or under construction. This is a known baseline that can be clearly defined.

E.25 An assessment of cumulative effects may also need to consider potential for effects resulting from the introduction of the proposal with other renewable energy developments which are consented or proposed but not yet built, under a 'future baseline' scenario. This baseline is to some extent uncertain and is partially speculative.

E.26 The 'future baseline' for cumulative assessment may therefore include (in addition to existing/under construction renewable energy developments):

- Renewable energy developments which have been granted planning permission but are not yet constructed; and
- Proposed renewable energy developments subject to a valid planning application.

E.27 Schemes that are at the pre-planning or scoping stage are not generally considered in the assessment. They should only be included *"if absolutely necessary to make a realistic assessment of potential cumulative effects"* (GLVIA3).

E.28 In accordance with GLVIA3 it may also be necessary to separately consider the total and additional cumulative effects of developments.

E.29 The list of schemes to include and assessment scenarios should be agreed with the Council who will need to decide what is reasonable and proportionate to request for specific applications.

Information required to be submitted as part of the cumulative assessment

E.30 The level of detail required will be dependent upon the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential

for cumulative effects. A pre-planning application meeting with the Council may provide an opportunity to discuss scope. The following presents some guidance on undertaking cumulative assessment of wind energy, solar PV or BESS developments in the City of Edinburgh Council area.

Study area and sites to be included

E.31 It is suggested that the assessment focuses on potentially significant cumulative effects and that a study area is selected to enable these significant effects to be reported. Study areas will depend on the size and location of other existing and proposed schemes within the landscape and will vary with the type of landscape, but initial areas of search may be up to 10km from the proposal, or wider for large/very large wind turbines (in accordance with NatureScot guidance). Sequential impacts should also be considered, for example, along a long-distance footpath. All existing and proposed renewables developments should be mapped within that area. The assessment may then focus on 'hotspot' areas to identify likely significant effects. This will help keep the assessment proportional to the scale of the project and the nature of its likely effects.

Cumulative ZTV Analysis

E.32 Creating Zones of Theoretical Visibility (ZTVs) for each development, and overlaying these to create a Cumulative ZTV (CZTV), could help indicate areas where the proposal is predicted to be visible (either on its own, or in conjunction with other renewable energy developments), and areas where other renewable energy developments will be visible but the proposal will not. This can help focus the assessment.

E.33 CZTVs should be provided to illustrate areas of visibility associated with other consented or proposed renewable energy developments (e.g. the 'future baselines'), if applicable. This may include, for example, a scenario that considers the proposal in the context of other existing, under construction and consented renewable energy developments (a fairly certain scenario) as well as a scenario that also considers the addition of other proposed developments (a less certain scenario).

Choice of viewpoints

E.34 A number of viewpoints should be selected to illustrate cumulative visual effects arising from the renewable energy development being assessed, in combination with other existing and proposed renewable energy developments. These selected

viewpoints may be the same as, or a subset, of the main LVIA viewpoints, or they may be different. In any case they should be selected specifically to illustrate cumulative effects, including sequential views, representing the worst-case. These should be agreed with the Council prior to submission of a planning application and preferably at the scoping stage.

Baseline evaluation for cumulative assessment

E.35 The sensitivity of the landscape and visual resource will be the same as that recorded in the LVIA. The 'future baselines' of speculative scenarios (e.g. those which include consented or proposed but yet unbuilt renewable energy projects) should be described, based on the assumption that these other schemes will be present in the landscape under these future baseline scenarios.

Preparing cumulative visualisations

E.36 Cumulative visualisations, to a level agreed with the Council, should be prepared from viewpoints to illustrate the nature and degree of cumulative change to the landscape and views. This is particularly important in cases where significant cumulative effects are predicted.

Describing and assessing effects

Magnitude of cumulative change to landscape

E.37 The magnitude of cumulative change to landscape character is the influence the additional renewables development will have on the character of the area which is informed by:

- The distance over which the proposal will have an influence on landscape character in combination with other renewable energy developments;
- The siting or location of the proposal in relation to other renewable energy developments (and their relationship to landscape character areas or types);
- The design of the proposal in relation to other renewable energy developments (including scale and layout of the development); and
- Whether key characteristics of the surrounding landscape are affected by the cumulative impact.

E.38 It will also be important to consider the combined effect of fencing, tracks, buildings and other ancillary features of the renewable energy developments on the landscape.

Magnitude of cumulative change to views

E.39 The magnitude of cumulative change to views should be described taking into account the following considerations:

- The arrangement of developments in the view, e.g. developments seen in one direction or part of the view, or seen in many directions;
- The visibility/prominence of the proposal compared to the other existing, consented and proposed schemes;
- The apparent distances, from the viewer, and between developments;
- The relationship between the various sizes and layouts of the developments;
- In the case of magnitude of change to routes (sequential effects), the relative duration and frequency of views of developments from routes; and
- Cumulative effect on views from settlements through use of CZTVs and visits to the settlements.

E.40 It will also be important to consider the combined effect of fencing, tracks, buildings and other ancillary features of the renewable energy developments on the landscape.

Significance

E.41 The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial.

Figures

E.42 The number of maps and illustrations may vary according to the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential for cumulative effects. However, as a guide the following illustrations will typically be required as part of the cumulative assessment for EIA development:

- Location map for all operational, consented and proposed sites within the study area, presented on OS base mapping of sufficient detail to indicate vegetation and public rights of way, with concentric distance bands;
- CZTVs for existing, consented and proposed renewable energy developments in combination with the proposal. CZTVs may be particularly useful for larger schemes – more than one CZTV may be useful to show different scenarios, as set out in the guidance above;
- CZTVs overlaid onto landscape character areas, landscape designations and assessment viewpoints as relevant; and
- Photographs and visualisations of up to 360 degrees to show the proposal in the context of other developments – annotated with site name, status (operational, consented, proposed), and clearly labelled to indicate how the images should be printed, held and viewed.

Report produced by LUC

Bristol
12th Floor, Beacon Tower, Colston Street, Bristol BS1 4XE
0117 389 0700

Cardiff
Room 1.12, 1st Floor, Brunel House, 2 Fitzalan Rd, Cardiff CF24 0EB
0292 254 0920

Edinburgh
Atholl Exchange, 6 Canning Street, Edinburgh EH3 8EG
0131 326 0900

Glasgow
5th Floor, The Garment Factory, 10 Montrose Street, Glasgow G1 1RE
0141 403 0900

London
250 Waterloo Road, London SE1 8RD
020 7199 5801

Manchester
4th Floor, 57 Hilton Street, Manchester M1 2EJ
0161 802 2800

Sheffield
32 Eyre Street, Sheffield, S1 4QZ
0114 392 2366

Email address for general enquiries: hello@landuse.co.uk

landuse.co.uk