

**South Gloucestershire Council**

# **Landscape Sensitivity Assessment**

## **Solar PV and wind energy development**

**Final report**

Prepared by LUC

September 2021



**South Gloucestershire Council**

**Landscape Sensitivity Assessment**  
**Solar PV and wind energy development**

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# Chapter 1

## Introduction

**This chapter gives an overview of this study**

### Background to this study

**1.1** This report is designed to inform plan-making, development management and land use decisions within South Gloucestershire, in support of the forthcoming Local Plan 2020.

**1.2** South Gloucestershire Council commissioned LUC to undertake a landscape sensitivity assessment for solar PV and wind energy development, as part of a wider Renewable Energy Resources Assessment Study (RERAS) undertaken by AECOM in collaboration with WECA (West of England Combined Authority). Together, these studies provide up-to-date evidence in relation to renewable energy generation and related infrastructure. The RERAS report sets out the broad technical parameters for renewable energy development, while this landscape sensitivity assessment helps to inform the analysis in the RERAS report. Unlike the RERAS study, this assessment does not consider biomass energy developments.

**1.3** This Landscape Sensitivity Assessment for wind energy and solar photovoltaic (PV) schemes provides judgements on the landscape sensitivity of different parts of South Gloucestershire to these forms of development. The findings of this study will allow the Council to identify broad areas for renewable energy development and establish a local policy framework for such development, in line with the National Planning Policy Framework (paragraph 151).

**1.4** The method is described in **Chapter 2** and results presented in **Chapter 3**. A User Guide is provided in **Appendix A**.

### Policy context

#### European Landscape Convention

**1.5** The European Landscape Convention (ELC) came into force in the UK in March 2007. It established the need to recognise landscape in law; to develop landscape policies dedicated to the protection, management and planning of landscapes; 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.

**1.6** The ELC definition of 'landscape' recognises that all landscapes matter, be they 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."*

**1.7** Signing up to the ELC means that the UK is committed to protect, manage and plan our landscapes for the future. The Convention also advocates work to raise landscape awareness, involvement and enjoyment amongst local and visiting communities. Landscape character is defined by the ELC 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 that 'all landscapes matter'.

### National Planning Policy Framework (NPPF)

**1.8** The UK Government published an updated and revised National Planning Policy Framework (NPPF) in July 2021, which sets out the environmental, social and economic planning policies for England. Central to NPPF policies is a presumption in favour of sustainable development; that development should be planned for positively and individual proposals should be approved wherever possible.

**1.9** One of the overarching objectives that underpins the NPPF is set out in Paragraph 8: "an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment."

**1.10** Paragraph 174 states that "planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes" and "recognising the intrinsic character and beauty of the countryside".

**1.11** The NPPF also makes explicit reference to the need for defined strategic policies that make sufficient provision for climate change mitigation and adaptation, landscape and green infrastructure (Paragraph 20).

**1.12** Paragraph 155 states that "to help increase the use and supply of renewable and low carbon energy and heat, plans should:

- a) *provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*

- b) *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development..."*

**1.13** This national policy requirement, along with the council's climate emergency declaration, are the key drivers behind the landscape sensitivity assessments.

### National Planning Policy Guidance (NPPG)

**1.14** Further guidance is provided in the NPPG on how local planning authorities can identify suitable areas for renewable and low carbon energy. It states that:

**1.15** "...when considering impacts, assessments can use tools to identify where impacts are likely to be acceptable. For example, landscape character areas could form the basis for considering which technologies at which scale may be appropriate in different types of location..."

**1.16** This study uses the framework of Landscape Character Areas and Landscape Character Types for the landscape sensitivity assessments as set out in the 2014 South Gloucestershire Landscape Character Assessment.

### Local Plan Policy

**1.17** The development of the Local Plan began in 2018, as part of the wider West of England Joint Spatial Plan. This was a shared strategic plan for South Gloucestershire and North Somerset, B&NES and Bristol Councils. The Joint Spatial Plan was halted at Examination stage, and the Plan was withdrawn in January 2020. Work is now underway on a West of England Combined Authority (WECA) Spatial Development Strategy which will form the context for the new Local Plan.

**1.18** Preparation of the new Local Plan is currently underway. The aim is to adopt the Plan at the end of 2023.

**1.19** The current adopted plan for South Gloucestershire is made up of the Core Strategy 2006-2027 (adopted December 2013) and the Policies, Sites and Places Plan (adopted November 2017).

**1.20** The following strategic objectives and policies relate directly to the Local Plan's stance on climate change, renewable energy and the protection of landscapes:

### Strategic Objectives

**1.21** There are three overarching strategic objectives in the Core Strategy 2006-2027:

- Delivering sustainable communities
- Improving health and well-being

- Mitigating and adapting to the impacts of climate change.

1.22 There are six themes with a number of objectives. Those relevant to the Council's stance on climate change, renewable energy and the protection of landscapes are:

- **Responding to climate change and high quality design**
  - Promoting energy efficient development and new sources of decentralised, renewable and low carbon sources of energy
- **Managing future development**
  - Recognising and protecting the identity and heritage of existing communities
  - Protecting the Green Belt and the countryside from inappropriate development
- **Managing the environment and heritage**
  - Conserving and enhancing the district's distinctive landscapes, natural environmental resources and biodiversity

#### Policies

1.23 Relevant policies within the Core Strategy 2006 – 2027 are:

- **Policy CS1 High Quality Design** states that development will only be permitted where the highest possible standards of design and site planning are achieved, and should demonstrate that:
  - Siting, form, scale, height, massing, detailing, colour and materials should be informed by, respect and enhance the character, distinctiveness and amenity of the site and its context;
  - Existing features of landscape, nature conservation, heritage or amenity value and public rights of way are safeguarded and enhanced;
  - Depending on the scale or significance of the scheme, that the vision and objectives in the South Gloucestershire Landscape Character Assessment and Cotswolds AONB Management Plans are taken into account;
  - Ensure the design, orientation and location of buildings, roof pitches, windows, habitable rooms, lighting and soft landscaping assist the appropriate siting of renewable and/or low carbon energy installations and infrastructure. Schemes that

outperform the statutory minimum requirements will be considered as good design.

- **Policy CS2 Green Infrastructure** states that existing and new Green Infrastructure (GI) is planned, delivered and managed as an integral part of creating sustainable communities and enhancing quality of life. GI objectives include realising the potential of Green Infrastructure to assist with mitigation of, and adaptation to, climate change, delivering high quality multi-functional and connected open spaces, protecting and enhancing species and habitats, conserving and enhancing landscape character, historical, natural, built and cultural heritage features, and securing on going management and maintenance and creation of GI assets. The attainment of these objectives should be addressed by development proposals as well as Local Plan Documents.

The South Gloucestershire Strategic Green Infrastructure Network diagram (Figure 1 p.40 of the Core Strategy) is illustrative and intended as a guide to the main GI assets that exist within South Gloucestershire, including the Visually Important Hillsides.<sup>1</sup>

- **Policy CS3 Renewable and Low Carbon Energy Generation** states that proposals for energy generation from renewable or low carbon sources will be supported, provided that installation will not cause significant demonstrable harm to residential amenity, either individually or cumulatively. Significant weight will be given to the wider environmental benefits associated with the increased production of renewable energy, proposals with significant community support, which generate an income for community infrastructure, the temporary nature of some types of installation, and the creation of reliable energy generation, job creation and local economic benefits. Renewable energy generation will not be supported in areas of national designation or areas of local landscape value unless they do not compromise the designation, especially for landscape character, visual impact and residential amenity, both individually and cumulatively.
- **Policy CS6 Infrastructure and Developer Contributions** states that all new development of a sufficient scale to add to the overall demand and impact on infrastructure will be required to provide infrastructure, services and community facilities to mitigate its impacts on existing communities and provide for needs arising from the development. This includes

<sup>1</sup> South Gloucestershire Local Plan: Core Strategy can be found [here](#)

district heating networks and other renewable and low carbon energy infrastructure.

- **Policy CS9 Managing the Environment and Heritage** states that new development is expected to conserve and enhance the character, quality, distinctiveness and amenity of the landscape and avoid the undeveloped coastal area.
- **Policy CS34 Rural Areas** states that development proposals will protect, conserve and enhance the rural areas distinctive character, beauty, wildlife, landscape, biodiversity and heritage and protect the unique and valuable setting provided by the rural areas to urban areas and settlements in South Gloucestershire, which contribute to the district's distinctive sense of place and identity.

**1.24** Relevant policies within the Policies, Sites and Places Plan are:

- **Policy PSP1 Local Distinctiveness** states that development proposals should demonstrate and understand of, and respond constructively to, the buildings and characteristics that make a particularly positive contribution to the distinctiveness of the area/locality.
- **Policy PSP2 Landscape** states that development proposals should conserve, and where appropriate enhance the quality, amenity, distinctiveness and special character of the landscape, as set out in the Landscape Character Assessment. Where landscape character is degraded or eroded development is expected to contribute to the restoration of landscape character and distinctiveness. Within the Cotswolds AONB great weight will be given to the conservation and enhancement of the natural and scenic beauty of the landscape. If development will affect the setting of the AONB, it must demonstrate it will not adversely impact the AONB.
- **Policy PSP3 Trees and Woodland** states that development should minimise the loss of existing vegetation on a site important in ecological, recreational, historical or landscape value terms. Where appropriate development proposals should protect trees, provide appropriate replacements in size and species, provide additional tree planting and new planting schemes.
- **Policy PSP6 Onsite Renewable and Low Carbon Energy** states that all development proposals will be

encouraged to minimise end-user energy requirements over and above the current building regulations, and are expected to ensure the design and orientation of roofs will aid the siting and efficient operation of solar technology. All major greenfield residential development must reduce CO<sub>2</sub> emissions by at least 20% through renewable and or low carbon energy generation sources on or near site, where practicable.

### Cotswolds Area of Outstanding Natural Beauty and City of Bath World Heritage Site Setting

**1.25** **Figure 1.1** shows which parts of the District falls within the Cotswolds Area of Outstanding Natural Beauty (AONB). This map also shows the indicative setting of the City of Bath World Heritage Site (WHS) which covers a small part of the District in the south-east.

### Cotswolds AONB

The Cotswolds AONB, now known as the Cotswolds National Landscape, was designated in 1966, with an extension in 1990. The AONB is located across 15 local authorities, and 118 square kilometres (25%) lies within South Gloucestershire<sup>2</sup>. There are many 'special qualities' of the AONB, including the unifying character of the limestone geology; the Cotswold escarpment; high wolds and river valleys; tranquillity and dark skies areas; accessibility for recreation; significant archaeological and historic associations; and vibrant cultural associations.

The latest Management Plan<sup>3</sup> was published in 2018 and covers the period to 2023. Relevant policies include:

- **Policy CC7: Climate Change – Mitigation** states that small-scale forms of renewable energy that are compatible with the AONB designation will help reduce greenhouse gas emissions.
- **Policy CE1: Landscape** states that development proposals should have regard to, be compatible with, and reinforce the landscape character and scenic of the location and its setting, ensuring views into and out of the AONB are conserved and enhanced.
- **Policy CE3: Local distinctiveness** states that development should be compatible with the strategy and guidelines set out in the Landscape Character Assessment.

**1.26** The Cotswolds Conservation Board's Position Statement on Renewable Energy (2014) acknowledges that, "*along with*

<sup>2</sup> <https://www.cotswoldsaonb.org.uk/our-landscape/cotswolds-aonb-fact-file/>

<sup>3</sup> Cotswolds Area of Outstanding Natural Beauty Management Plan 2018-2023, Cotswolds Conservation Board.

<https://www.cotswoldsaonb.org.uk/planning/cotswolds-aonb-management-plan/>

*other areas [the AONB] must play its part in reducing emissions, and this may be helped by the small-scale, local generation of energy from renewable sources. However, any schemes should ensure the conservation and enhancement of the natural beauty of the area”.*

### City of Bath World Heritage Site Setting

**1.27** The City of Bath World Heritage Site (WHS) was inscribed in 1987 and covers the entire urban area of Bath. The setting of the WHS covers a total of 101 square kilometres, of which 2 square kilometres (2%) lie with South Gloucestershire.

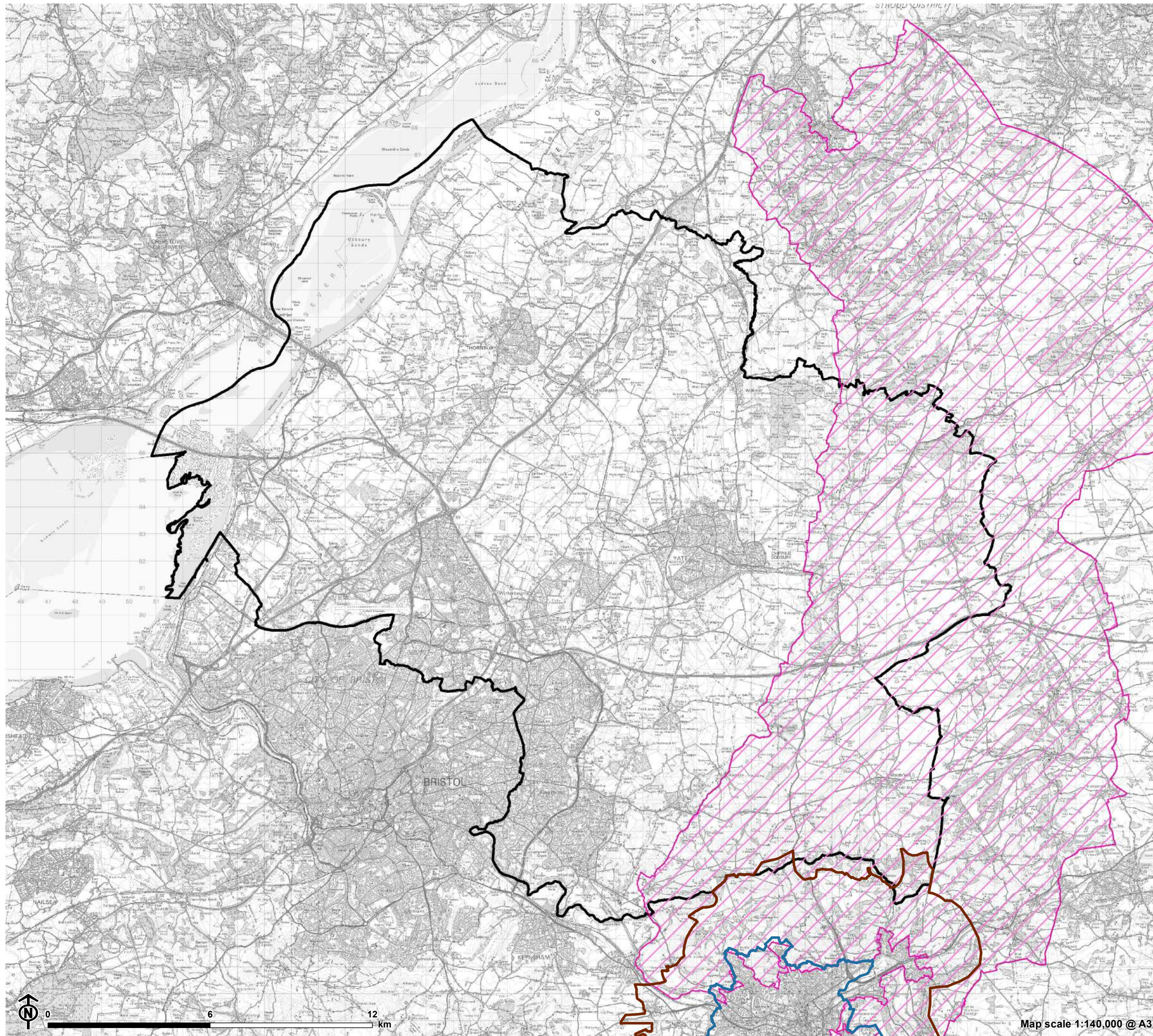
**1.28** The indicative setting of the WHS was recognised in 2013 through the City of Bath World Heritage Site Setting Supplementary Planning Document (SPD)<sup>4</sup> which was issued to ensure planning decisions can be made based on a thorough understanding of the consequences of any proposals. The landscape setting relates to the striking and complex landform that contains the city within a ‘bowl’ and its open green character.

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<sup>4</sup> SPD available from [here](#)



Figure 1.1: Coverage of statutory landscape designations within and surrounding South Gloucestershire



- South Gloucestershire district boundary
- City of Bath World Heritage Site**
- Indicative World Heritage Site setting
- World Heritage Site
- Area of Outstanding Natural Beauty**
- Cotswolds

## Chapter 2

### Method

## This chapter sets out the method for the Landscape Sensitivity Assessment

### Scope of the assessments

**2.1** The landscape sensitivity assessments focus on the landscape considerations associated with ground-mounted solar photovoltaic (PV) and wind energy developments at a strategic level.

**2.2** The results of the assessments (**Chapter 3**) describe the relative landscape sensitivity of different areas within South Gloucestershire to solar PV and wind energy developments. A User Guide is included in **Appendix A** and should assist in using the assessment to shape proposals in appraising planning applications for renewable energy development.

**2.3** The assessment uses an established methodology consistent with national guidance. These results should be interpreted alongside the detailed information provided in separate assessment profiles.

**2.4** The assessment should not be interpreted as a definitive statement on the suitability of certain locations for development. It is also important to note that this assessment does not provide guidance on the wide range of other planning issues that need to be considered as part of the preparation and determination of planning applications for renewable energy developments.

### Spatial framework for the assessment

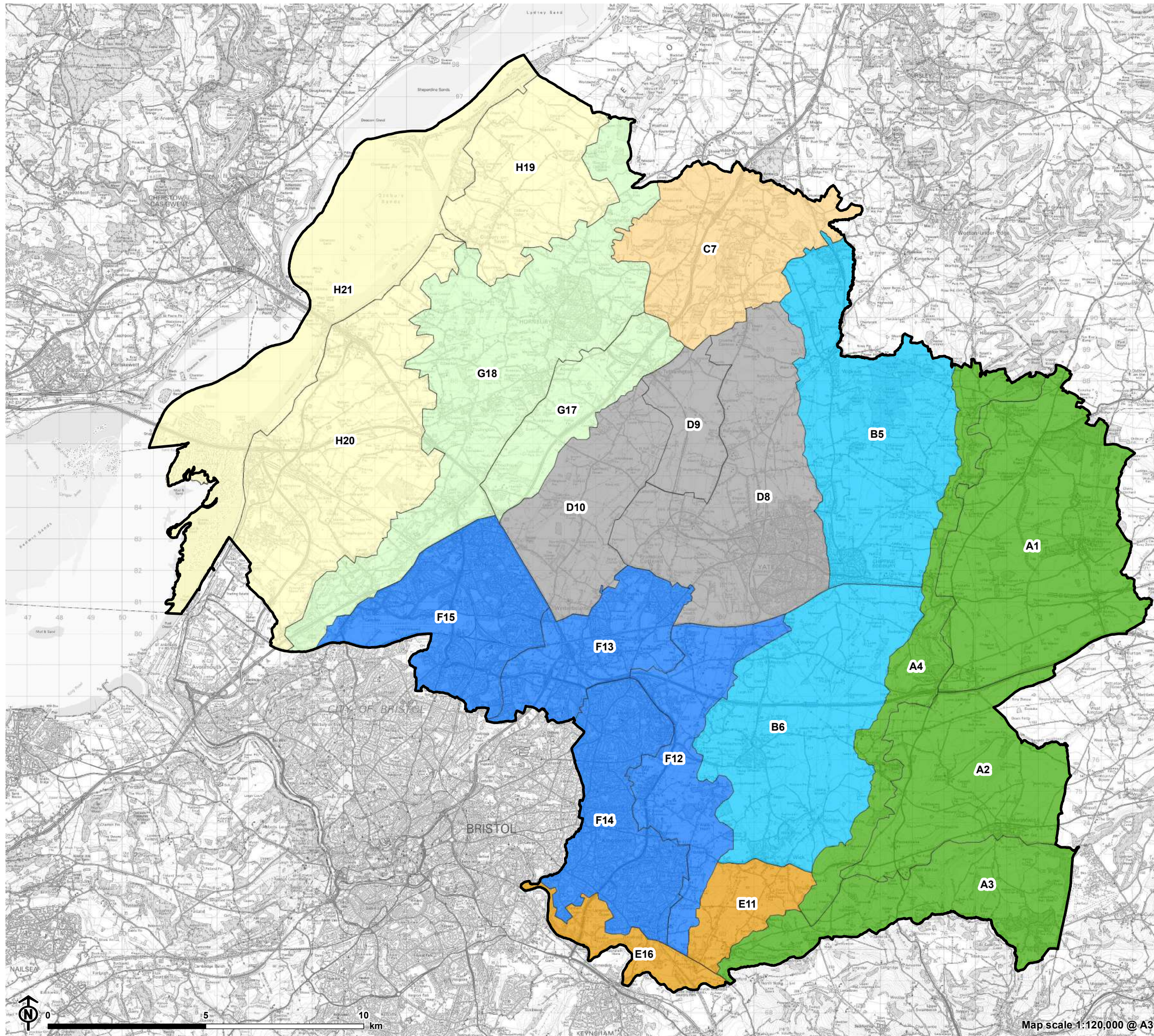
**2.5** The assessment uses the spatial framework of Landscape Character Types (LCTs) and component Landscape Character Areas (LCAs) identified by the existing South Gloucestershire Landscape Character Assessment (2014)<sup>5</sup>. These are shown in **Figure 2.1**.

**2.6** The assessment considered those areas which are suitable for onshore renewable energy development. A small number of LCA were excluded from the study including those in urban areas or offshore.

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<sup>5</sup> South Gloucestershire LCA (2014) is available [here](#)

Figure 2.1: Landscape Character Types and Areas within South Gloucestershire



- South Gloucestershire district boundary
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp
  - A1. Badminton Plateau
  - A2. Marshfield Plateau
  - A3. Ashwicke Ridges
  - A4. Cotswold Scarp
- B. Shallow Ridge
  - B5. Wickwar Ridge and Vale
  - B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale
  - C7. Falfield Vale
- D. Shallow Vale
  - D8. Yate Vale
  - D9. Tytherington Plain
  - D10. Earthcott Vale
- E. Enclosed Valleys
  - E16. Avon Valley
  - E11. Golden Valley
- F. Broad Valleys
  - F12. Westerleigh Vale and Oldland Ridge
  - F13. Frome Valley
  - F14. Kingswood
  - F15. Patchway and Filton
- G. Undulating Ridge
  - G17. Rudgeway and Tytherington Ridge
  - G18. Severn Ridges
- H. Estuary Shoreline and Levels
  - H19. Oldbury Levels
  - H20. Piling Levels
  - H21. Severn Shoreline and Estuary

Map scale 1:120,000 @ A3

## Characteristics of solar PV and wind energy developments and their potential landscape impacts

### Solar PV developments

**2.7** Solar PV developments although not prominent in terms of height, can occupy substantial areas of ground which may be visible, particularly if located on slopes. Landscape effects may include the following:

- Solar PV developments may be particularly visible in open landscapes or on upper slopes of hillsides or where overlooked.
- On a sunny day they can appear blue, while on a cloudy day they can appear a dark grey, both of which contrast with surrounding green areas.
- The presence of Solar PV panels and associated infrastructure may increase the perceived human influence on the landscape and erode intrinsically rural character.
- Solar PV development will change the land use and appearance of a field or fields, affecting land cover patterns.
- The regular edges of solar PV developments may be conspicuous in more irregular landscapes (particularly where field boundaries are irregular)
- The height of racks (up to 3m) may overtop typical hedgerow field boundaries.
- Screen planting around solar PV developments may change the sense of enclosure of a landscape.
- Construction of solar PV development may result in damage to landscape features such as hedgerow field boundaries and alter the landscape scale.
- Structures may appear out of place in particularly wild or undeveloped landscape which are valued for their qualities of remoteness.

### Wind energy developments

**2.8** All turbines considered in this study are substantial 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 the direct loss of landscape features e.g. trees and hedgerows
- The movement of the 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 and remoteness.
- The presence of turbines may increase the influence of built development on the landscape.
- Turbines may be perceived as out of scale in relation to human scale features in the landscape e.g. farmsteads, rural lanes, walls and hedgerows.
- Turbines on skylines may compete with existing skyline features (e.g. church towers) for prominence, where prominent undeveloped skylines or landmark features are characteristic of the landscape.
- Access tracks or upgrades on access routes may be highly visible, particularly in open upland landscapes or undeveloped landscapes.

## Type and scale of solar PV developments considered

**2.9** The assessment considers the landscape sensitivity of the landscape within South Gloucestershire and to ground-mounted solar PV developments. Such developments consist of 'arrays' of solar PV panels, usually around three metres in height and mounted on aluminium / stainless steel frames, with associated infrastructure including inverters, on-site powerhouse, security fencing and CCTV. Solar PV developments in domestic gardens or roof mounted panels are outside the scope of this study.

**2.10** The assessment judges the suitability of different scales of solar PV developments, based on bandings that reflect those that are most likely to be put forward by developers. The sizes<sup>6</sup> used for the assessment are set out in **Table 2.1**.

**2.11** Proposed solar PV developments larger than 60ha have not been considered in this assessment. Landscape sensitivity to these very large schemes would be categorised as "high" sensitivity regardless of location, requiring developers to pay particular attention to this issue in their specific applications.

<sup>6</sup> The sizes of solar PV developments indicate the areas taken up by solar PV panels only.

Table 2.1: Solar PV development sizes

Solar PV Development Banding	Area
Band A	≤5ha
Band B	6ha – 10ha
Band C	11ha -15ha
Band D	16ha – 30 ha
Band E	31ha to 60ha

### Type and scale of wind energy developments considered

**2.12** The wind energy landscape sensitivity assessment applies to all forms of wind turbines, although it has been based on the most common horizontal axis three-bladed turbine.

**2.13** The assessment considers the suitability of different turbine heights (to blade tip), based on bandings that reflect those that are most likely to be put forward by developers (now and in the future). These are set out in **Table 2.2** below.

Table 2.2: Wind turbine development sizes

Wind Energy Development Banding	Turbine Height (to blade tip)
Band A	18 – 25m
Band B	26 – 60m
Band C	61 – 100m
Band D	101 – 120m
Band E	121 – 150m

**2.14** Turbine heights below 18m are not considered within this assessment, as turbines of this size are not considered to have an impact on the landscape. In addition, permitted development rights apply to domestic wind turbines if standalone wind turbines do not exceed 11.1m and building mounted wind turbines do not exceeding 15m (including building, hub, and blade)<sup>7</sup>.

### Cumulative effects

**2.15** As larger numbers of renewable energy developments are built, it is increasingly necessary to consider their cumulative effects. Cumulative effects of multiple schemes are a significant issue for planning authorities, particularly for free

standing solar PV developments, which tend to cluster around grid connection points.

**2.16** The most significant cumulative effects are those that result in changes in the character of a landscape of 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 another development could tip the balance through its additional effects.

**2.17** Key considerations are how different developments relate to each other, their frequency as one moves through the landscape, and their visual separation. These are most appropriately considered at the individual site level, including through the process of Cumulative LVIA.

### Evaluating landscape sensitivity

**2.18** This assessment draws on advice contained in Natural England's 'Approach to landscape sensitivity assessment' (2019)<sup>8</sup> which supersedes 'Techniques and criteria for judging capacity and sensitivity' (Natural England, 2002). This describes the term 'landscape sensitivity', within the context of spatial planning and land management, as follows:

*"Landscape sensitivity may be regarded as a measure of the resilience, or robustness, of a landscape to withstand specified change arising from development types or land management practices, without undue negative effects on the landscape and visual baseline and their value."*

**2.19** It is a term applied to landscape character and the associated visual resource, combining judgements of their susceptibility to the specific development type / development scenario or other change being considered together with the value(s) related to that landscape and visual resource.

### Assessment criteria

**2.20** Landscape sensitivity assessment requires judgements on both landscape susceptibility (how vulnerable the landscape is to change from the type being assessed, in this case solar PV and wind energy developments) and landscape value (consensus about importance, which can be recognised through designation as well as through descriptions within the 2014 Landscape Character Assessment).

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

<sup>7</sup>[https://www.planningportal.co.uk/info/200130/common\\_projects/57/wind\\_turbines/3](https://www.planningportal.co.uk/info/200130/common_projects/57/wind_turbines/3)

<sup>8</sup> Natural England's 2019 approach document is available [here](#)

on current best practice and experience of LUC in undertaking similar studies elsewhere in the UK.

**2.22** The following five criteria headings are used for this study:

- Landform and scale (including sense of openness / enclosure);
- Landcover (including field and settlement patterns);
- Historic landscape character;
- Visual character (including skylines<sup>9</sup>); and
- Perceptual and scenic qualities.

**2.23 Tables 2.4 and 2.5** at the end of this chapter provide guidance and examples of higher and lower sensitivity features/attributes for applying the criteria in South Gloucestershire, for solar PV and wind energy, 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 landscapes (due to 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 (see **Appendix B**). This was supplemented by field survey work undertaken by a team of landscape professionals to verify the findings.

### Making overall judgements on landscape sensitivity

**2.24** Once the landscape sensitivity criteria were assessed individually, the results were translated into overall scores of landscape sensitivity (see **Table 2.3**) for the different bandings of solar PV and wind energy developments. This was undertaken for every LCT and the results are shown in the individual assessment profiles. If any component LCAs within the LCT were judged to be of higher/lower landscape sensitivity (due to local variations), this is accounted for in the assessments and results.

**Table 2.3: The five-point scale landscape sensitivity scale**

Sensitivity Level	Definition
High (H)	Key characteristics and qualities of the landscape are highly vulnerable to change from wind and solar energy development. Such development is likely to result in a significant change in character.

Sensitivity Level	Definition
Moderate - High (M-H)	Key characteristics and qualities of the landscape are vulnerable to change from wind and solar energy development. There may be some limited opportunity to accommodate wind turbines/ solar panels without significantly changing landscape character. Great care would be needed in siting and design.
Moderate (M)	Some of the key characteristics and qualities of the landscape are vulnerable to change. Although the landscape may have some ability to absorb wind and solar energy development, it is likely to cause a degree of change in character. Care would be needed in siting and design.
Low - Moderate (L-M)	Fewer of the key characteristics and qualities of the landscape are vulnerable to change. The landscape is likely to be able to accommodate wind and solar energy development with limited change in character. Care is still needed when siting and designing to avoid adversely affecting key characteristics.
Low (L)	Key characteristics and qualities of the landscape are robust in that they can withstand change from the introduction of wind turbines and solar panels. The landscape is likely to be able to accommodate wind and solar energy development without a significant change in character. Care is still needed when siting and designing these developments to ensure best fit with the landscape.

**2.25** The five defined levels of landscape sensitivity form stages on a continuum, rather than clearly separated categories. Any given landscape may or may not fit neatly into one category, and an element of professional judgement is required.

**2.26** 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 a landscape’s sensitivity to development is the result of a complex interplay of often unequally weighted variables (or ‘criteria’).

**2.27** There may be one criterion that has a strong influence on landscape sensitivity in a particular LCT (or LCA) which increases the overall landscape sensitivity score (an example for solar PV might be a landscape with a prominent/highly visible ridgeline, or significant coverage of semi-natural habitats). There may also be criteria that produce conflicting scores. For example, a small-scale landscape with historic field patterns may also afford greater screening of panels from topography and a dense network of hedgerows. A conflicting example for wind could be in the context of a settled landscape. While it would have a greater human influence

<sup>9</sup> Visually Important Hillside are identified in Policy CS2 of the Core Strategy 2006-2027 (adopted 2013) and the Strategic Green

Infrastructure Network diagram) and within the South Gloucestershire Landscape Character Assessment SPD (2014).

(indicating a lower sensitivity to new development), it would also contain more human scale features that could be affected by large-scale wind turbines (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 point of view.

**2.28** 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 LCT/LCA.

### Presentation of results

**2.29** 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, with component Character Areas and representative photographs
- A summary description of the LCT against each of the assessment criteria, giving a landscape sensitivity assessment rating for both development types (following the approach set out at **Tables 2.4** and **2.5**).
- An overall discussion on the landscape sensitivity of the LCT to new solar PV and wind energy developments, referencing particular features, attributes or locations which may be more or less sensitive.
- Landscape sensitivity scores for new solar PV and wind energy development within each of the different bandings, using the five-point scale shown at **Table 2.3**.
- Discussion of any variations to the overall LCT scores at the LCA level.

**2.30** The next chapter sets out the overall results of the assessments.

Table 2.4: Criteria and guidance for assessing landscape sensitivity to solar PV development

Landform and scale (including sense of openness/ enclosure)				
<p>A flat or gently undulating lowland landscape or extensive plateau is likely to be less sensitive to solar PV development than a landscape with prominent landforms and visible slopes. This is because arrays of solar PV panels will be less easily perceived in a flat landscape than on a slope (including hills and knolls), especially higher slopes.</p> <p>A landscape with a strong sense of enclosure (e.g. provided by land cover such as woodland, tree cover or high hedges) is likely to be less sensitive to solar PV development than an open and unenclosed landscape because these features will be able to provide screening.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>An extensive lowland flat landscape or plateau, often a larger scale landform.</p> <p>A very well enclosed landscape – e.g. with fields bounded by high hedges and dense tree/woodland cover.</p>	<p>A simple gently rolling landscape, likely to be a medium-large scale landform.</p> <p>Some enclosure provided by hedges and tree/woodland cover.</p>	<p>An undulating landscape, perhaps also incised by valleys, likely to be a medium scale landform, with hidden areas as well as some visible slopes.</p> <p>Some areas lacking screening by field boundaries or tree cover, whilst others might have a greater sense of enclosure owing to a denser occurrence of these features.</p>	<p>A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may contain prominent, visible slopes with little sense of enclosure (low, few or no hedgebanks or trees/areas of woodland).</p>	<p>A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform. The landform may be very steep with exposed, visible slopes and no field boundaries or tree cover to provide screening.</p>
Landcover (including field and settlement patterns)				
<p>Since solar PV panels introduce a new land cover (of built structures), landscapes containing existing hard surfacing or built elements (e.g. urban areas, brownfield sites or large-scale horticulture) are likely to be less sensitive to field-scale solar PV development than highly rural or naturalistic landscapes. Landscapes with small-scale, more irregular field patterns are likely to be more sensitive to the introduction of solar PV development than landscapes 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 could exceed that of a hedge or stone wall).</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>A landscape with large-scale, regular fields of mainly modern origin.</p> <p>An urban or 'brownfield' landscape.</p>	<p>A landscape which is mainly defined by large, modern fields or those sub-divided for non-traditional uses, e.g. horse keeping.</p> <p>An area of large-scale horticulture or some urban or brownfield influences.</p>	<p>A landscape with a mixture of large-scale, modern fields and some smaller, more historic enclosure.</p> <p>A rural landscape, perhaps with some brownfield sites or urban influences.</p>	<p>A landscape dominated by ancient, small-scale field patterns with a few isolated areas of modern enclosure and / or with some areas of semi-natural land cover.</p>	<p>A landscape characterised by small-scale, ancient field patterns and/ or a landscape dominated by semi-natural land cover.</p>



Historic landscape character				
<p>Landscapes which contain important archaeological or historic features or historic associations are likely to have a higher level of sensitivity to solar PV development. Historical features may be in the form of historic land cover types and field systems, areas of buried archaeology, historic landscapes such as Registered Parks and Gardens or buildings/structures designated for their historical significance.</p> <p>Areas which make a significant contribution to the setting of a historical feature or landscape may also have higher sensitivity to solar PV development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to solar PV development.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
A landscape with relatively few historic features important to the character of the area and little time depth (i.e. large intensively farmed fields).	A landscape with a small number of historic features important to the character area and some time depth.	A landscape with some visible historic features of importance to character, and a variety of time depths.	A landscape with many historic features important to the area and a strong sense of time depth.	A landscape with a high density of historic features important to the character of the area and great time depth
Visual character (including skylines)				
<p>The relative visibility of a landscape may influence its sensitivity to solar PV development. An elevated landscape such as a hill range or plateau, which is viewed from other landscapes, may be more sensitive than an enclosed landscape since any solar panels will be more widely seen. Landscapes which have important visual relationships with other areas, for example where one area provides a backdrop to a neighbouring area (which may be a designated landscape such as the Cotswolds AONB), 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 landscapes provide a setting for one another.</p> <p>Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to solar PV development because panels 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 landforms. Where skylines are affected by development, e.g. through the presence of electricity pylons, the addition of solar panels may lead to visual confusion due to differences in scale. Therefore, developed skylines might not necessarily indicate lower sensitivity.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>An enclosed, self-contained landscape, or one with weak connections to neighbouring areas.</p> <p>A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.</p>	<p>A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related.</p> <p>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.</p>	<p>A landscape which has some inter-visibility with neighbouring areas.</p> <p>A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.</p>	<p>A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated.</p> <p>A landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.</p>	<p>A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as AONB.</p> <p>A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.</p>

Perceptual and scenic qualities				
<p>Landscapes that are relatively remote or tranquil tend to be more sensitive to solar PV development, since solar panels may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which have a perceived naturalness or a strong feel of traditional rurality, 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 development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.</p> <p>Landscapes that have a high scenic quality (including those within Cotswolds AONB and City of Bath WHS setting) will be more sensitive. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, AONB Management Plans and noted from fieldwork.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land.</p> <p>A landscape with much human activity and modern development, such as industrial areas.</p>	<p>A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements.</p> <p>A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes.</p>	<p>A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within AONB.</p> <p>A rural landscape with some modern development and human activity, such as intensive farmland.</p>	<p>A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as AONB.</p> <p>A more naturalistic landscape and/or one with little modern human influence and development.</p>	<p>A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities.</p> <p>A tranquil landscape with little or no overt sign of modern human activity and development.</p>

Table 2.5: Criteria and guidance for assessing landscape sensitivity to wind energy development

Landform and scale (including sense of openness/ enclosure)				
A flat or gently sloping landform is likely to be less sensitive to wind energy development than a landscape with a dramatic rugged landform, distinct landform features (including prominent hills and valleys) 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 landscapes. Landscapes with frequent human scale features <sup>10</sup> , 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	Low-Moderate	Moderate	Moderate-High	High
An extensive lowland flat landscape or plateau with few/no human-scale features; often a larger scale landform.	A simple gently rolling landscape with occasional human-scale features such as trees and domestic buildings; likely to be a medium-large scale landform.	An undulating landscape, perhaps also incised by valleys, likely to be a medium scale landform, with hidden areas as well as some visible slopes.	A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may contain prominent, visible slopes and frequent human-scale features.	A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform often with a dense distribution of human-scale features, such as woodland. The landform may be very steep with exposed, visible slopes.
Landcover (including field and settlement patterns)				
Simple, regular landscapes with extensive areas of consistent land cover are likely to be less sensitive to wind energy development than landscapes with more complex or irregular land cover patterns, smaller and / or irregular field sizes.				
Low	Low-Moderate	Moderate	Moderate-High	High
An open, continuous landscape with uniform land cover, or an urban or 'brownfield' landscape.	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.	A landscape with medium sized fields (or a mix of modern and historic enclosure) and some variations in land cover. A rural landscape which may contain some brownfield sites or urban influences	A landscape with irregular or small-scale fields and a variety in land cover. A rural landscape, perhaps with some areas of semi-natural land cover.	A landscape with a strong variety in land cover, complex field patterns and / or semi-natural land cover.  The field pattern may be characterised by small-scale, ancient fields.

<sup>10</sup> Human scale features are aspects of land cover such as stone walls, hedges, buildings which give a 'human scale' to the landscape.

Historic landscape character				
<p>Landscapes which contain important archaeological or historic features or historic associations are 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, areas of buried archaeology, historic designed landscapes such as a Registered Park and Garden, or buildings/structures designated for their historical significance.</p> <p>Areas which make a significant contribution to the setting of a historical feature or landscapes may also have higher sensitivity to wind energy development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to wind energy development.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
A landscape with relatively few historic features important to the character of the area, and little time depth (i.e. large intensively farmed fields).	A landscape with a small number of historic features important to the character area and some time-depth.	A landscape with some visible historic features of importance to character, and a variety of time depths.	A landscape with many historic features important to the area and a strong sense of time depth.	A landscape with a high density of historic features (many designations) important to the character of the area and great time depth.
Visual character (including skylines)				
<p>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 other landscapes, may be more sensitive than a landscape with limited visibility. Landscapes which have important visual relationships with other areas, for example where one area provides a backdrop to a neighbouring area (which may be a designated landscape such as an AONB), 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 landscapes provide a setting for one another.</p> <p>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.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>An enclosed, self-contained landscape, or one with weak connections to neighbouring areas.</p> <p>A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.</p>	<p>A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related.</p> <p>A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features on the skyline – other skylines in adjacent LCTs may be more prominent.</p>	<p>A landscape which has some inter-visibility with neighbouring areas, and/or where relationships between adjacent landscapes are of more importance.</p> <p>A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.</p>	<p>A landscape which is inter-visible with several areas, and/or where adjacent areas are strongly interrelated.</p> <p>A landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.</p>	<p>A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as AONB or part of the WHS setting.</p> <p>A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.</p>

Perceptual and scenic qualities				
<p>Landscapes that are relatively remote or tranquil tend to be more sensitive to wind energy, since turbines may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which have a perceived naturalness or a strong feel of traditional rurality, 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. Wind energy development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.</p> <p>Landscapes that have a high scenic quality (including those within the Cotswolds AONB or City of Bath World Heritage Site setting) will be more sensitive to wind energy development. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, AONB Management Plan and noted from fieldwork.</p>				
Low	Low-Moderate	Moderate	Moderate-High	High
<p>A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land.</p> <p>A landscape with much human activity and modern development, such as industrial areas.</p>	<p>A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements.</p> <p>A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes.</p>	<p>A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within AONB.</p> <p>A rural landscape with some modern development and human activity, such as intensive farmland.</p>	<p>A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as AONB.</p> <p>A more naturalistic landscape and/or one with little modern human influence and development.</p>	<p>A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities.</p> <p>A tranquil landscape with little or no overt sign of modern human activity and development.</p>

## Chapter 3

# Landscape Sensitivity Assessment Results

This chapter presents the overall results of the assessment

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

**3.2** The overall results of the landscape capacity assessment are set out in **Tables 3.1 and 3.2**.

**3.3** **Figures 3.1 to 3.5** present a spatial representation of the landscape sensitivity of South Gloucestershire to accommodate new solar PV development (by the five different size bandings). These are followed by **Figures 3.6 to 3.10** for wind energy development.

**3.4** These maps should always be referred to alongside the individual assessment profiles which set out the scores and reasonings behind them.

Table 3.1: Landscape sensitivity to new solar PV development: South Gloucestershire

LCT	LCA	Landscape sensitivity to solar PV development				
		BAND A (≤5ha)	BAND B (6-10ha)	BAND C (11-15ha)	BAND D (16-30ha)	BAND E (31-60ha)
A: Plateau and Scarp	A1: Badminton Plateau	L-M	M-H	H	H	H
	A2: Marshfield Plateau	L-M	M-H	H	H	H
	A3: Ashwicke Ridges	M-H	M-H	H	H	H
	A4: Cotswold Scarp	H	H	H	H	H
B: Shallow Ridge <sup>11</sup>	B5: Wickwar Ridge & Vale	L-M	M	M-H	H	H
	B6: Pucklechurch Ridge & Boyd Valley	L-M	M	M-H	H	H
C: Parkland Vale	C7: Falfield Vale	L-M	L-M	M-H	H	H
D: Shallow Vale	D8: Yate Vale	L	L-M	M	M-H	M-H
	D9: Tytherington Plain	L	L-M	M	M-H	M-H
	D10: Earthcott Vale	L	L-M	M	M-H	M-H
E: Enclosed Valleys	E16: Avon Valley	L	M	H	H	H
	E11: Golden Valley	L-M	M-H	H	H	H
F: Broad Valleys	F12: Westerleigh Vale & Oldland Ridge	L-M	L-M	M	M-H	H
	F13: Frome Valley	L	L-M	L-M	M	M-H
G: Undulating Ridge	G17: Rudgeway & Tytherington Ridge	L	L-M	M	M-H	H
	G18: Severn Ridges	L-M	L-M	M	M-H	H
H: Estuary, Shoreline and Levels	H19: Oldbury Levels	L-M	M	M-H	H	H
	H20: Pilning Levels	L	L-M	L-M	M	M-H

Table 3.2: Landscape sensitivity scores to new wind energy developments: South Gloucestershire

LCT	LCA	Landscape sensitivity to wind energy development				
		BAND A (18-25m)	BAND B (26-60m)	BAND C (61-100m)	BAND D (101-120m)	BAND E (121-150m)
A: Plateau and Scarp	A1: Badminton Plateau	L-M	M-H	H	H	H
	A2: Marshfield Plateau	L-M	M-H	H	H	H

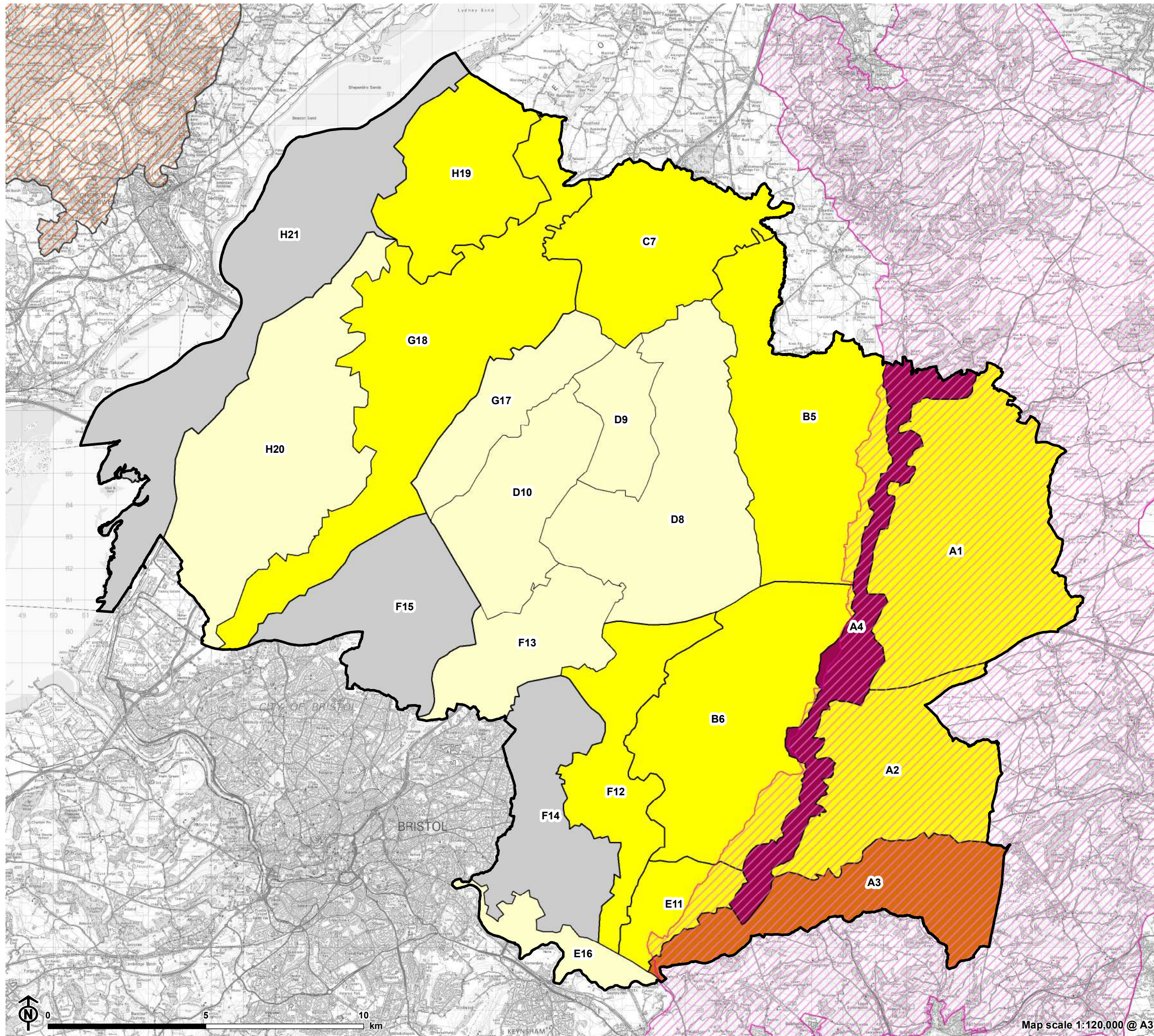
<sup>11</sup> The eastern margin of LCA B5 and B6 are located within the Cotswolds AONB

LCT	LCA	Landscape sensitivity to wind energy development				
		BAND A (18-25m)	BAND B (26-60m)	BAND C (61-100m)	BAND D (101-120m)	BAND E (121-150m)
	A3: Ashwicke Ridges	M-H	H	H	H	H
	A4: Cotswold Scarp	H	H	H	H	H
B: Shallow Ridge <sup>12</sup>	B5: Wickwar Ridge & Vale	L-M	M	M-H	H	H
	B6: Pucklechurch Ridge & Boyd Valley	L-M	M	M-H	H	H
C: Parkland Vale	C7: Falfield Vale	L-M	L-M	M-H	H	H
D: Shallow Vale	D8: Yate Vale	L	L-M	M	M-H	H
	D9: Tytherington Plain	L	L-M	M	M-H	M-H
	D10: Earthcott Vale	L	L-M	M	M-H	M-H
E: Enclosed Valleys	E16: Avon Valley	L-M	M	H	H	H
	E11: Golden Valley	M	H	H	H	H
F: Broad Valleys	F12: Westerleigh Vale & Oldland Ridge	L	L-M	M	H	H
	F13: Frome Valley	L	L-M	M	M-H	H
G: Undulating Ridge	G17: Rudgeway & Tytherington Ridge	L-M	M	M-H	M-H	H
	G18: Severn Ridges	L-M	M	M-H	H	H
H: Estuary, Shoreline and Levels	H19: Oldbury Levels	L-M	M	M-H	H	H
	H20: Pilning Levels	L	L-M	M	M-H	M-H

<sup>12</sup> The eastern margin of LCA B5 and B6 are located within the Cotswolds AONB



Figure 3.1: Landscape sensitivity for future Band A (≤5ha) solar energy development

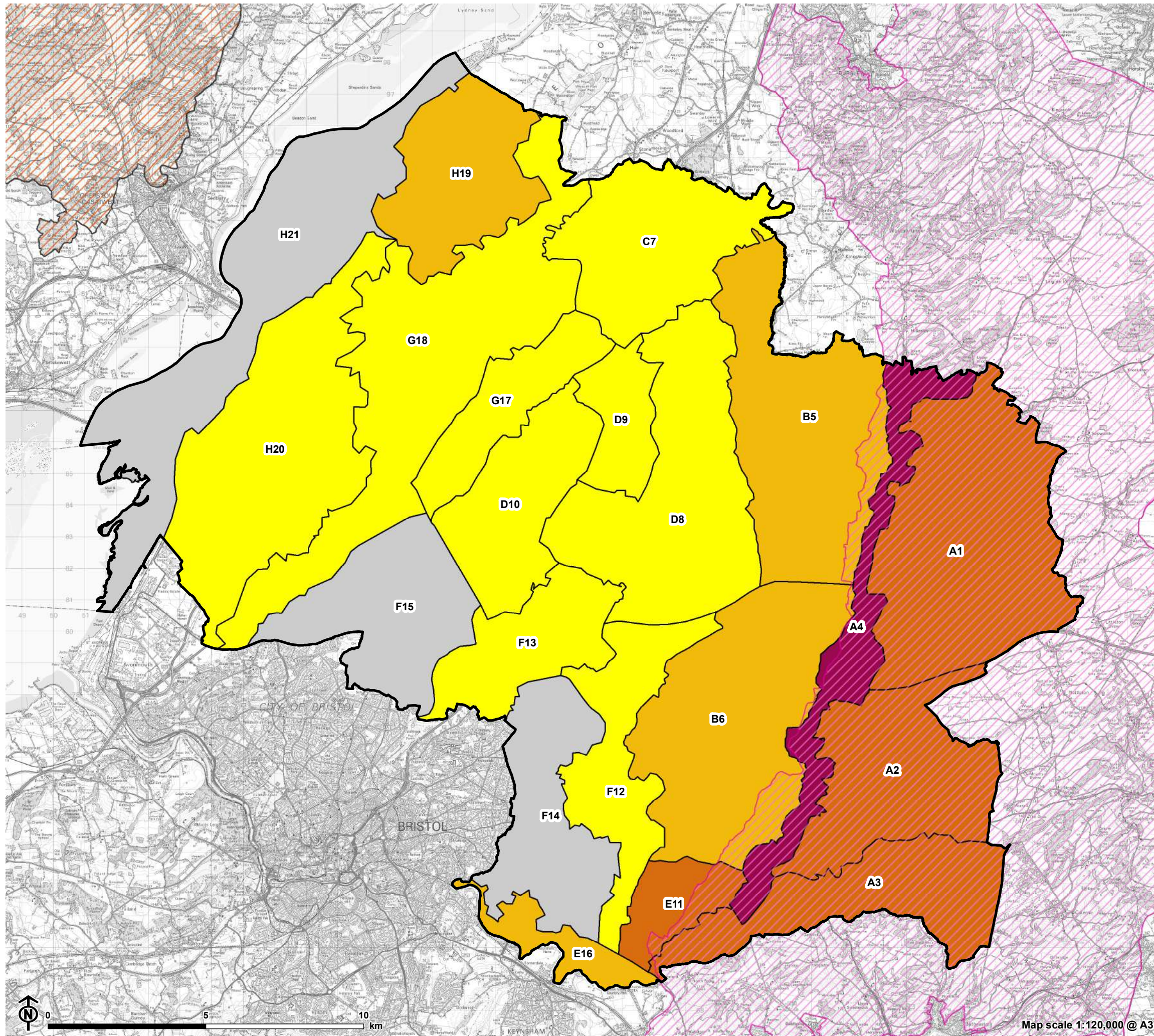


- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary



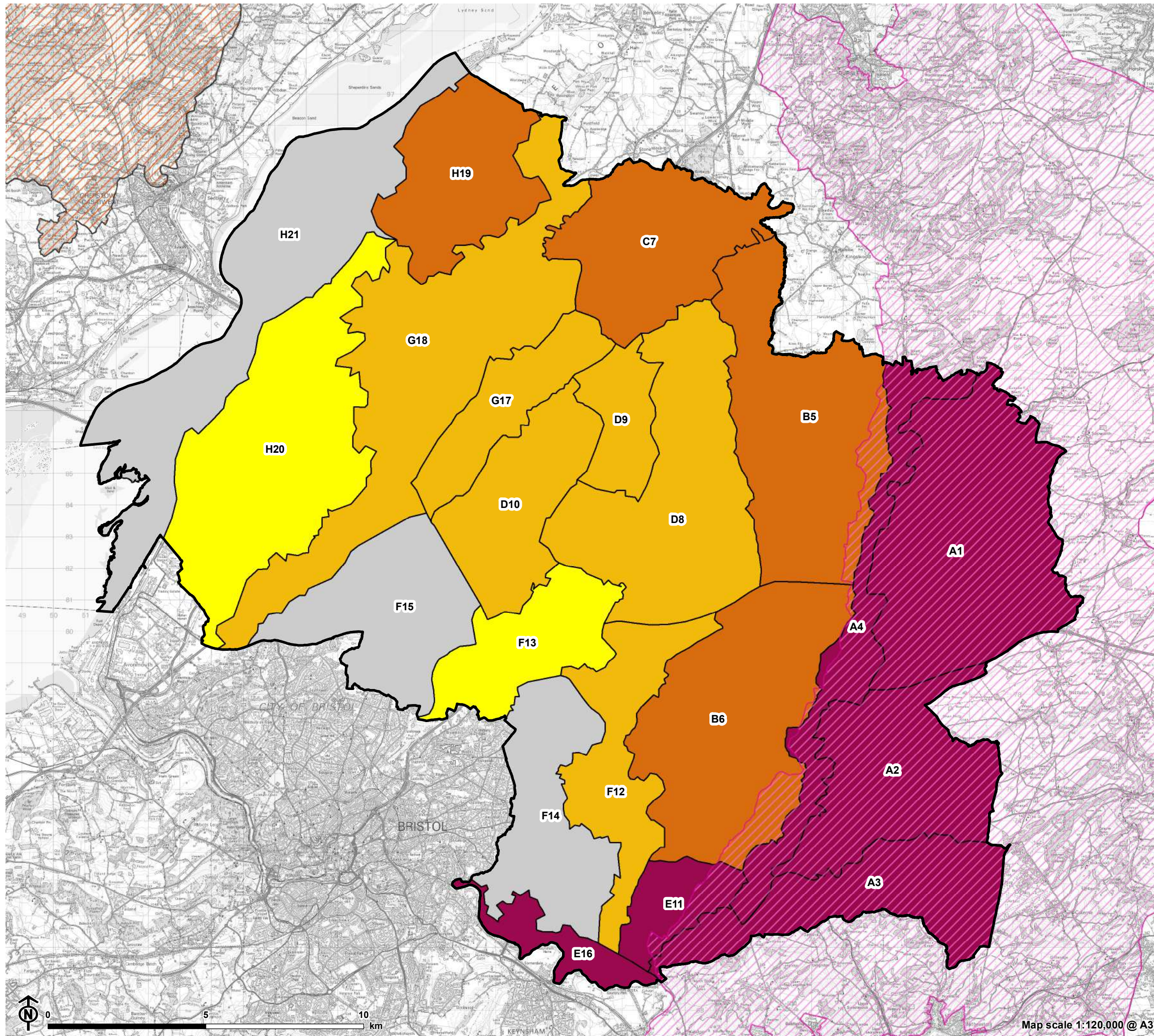
Map scale 1:120,000 @ A3

Figure 3.2: Landscape sensitivity for future Band B (6ha to 10ha) solar energy development



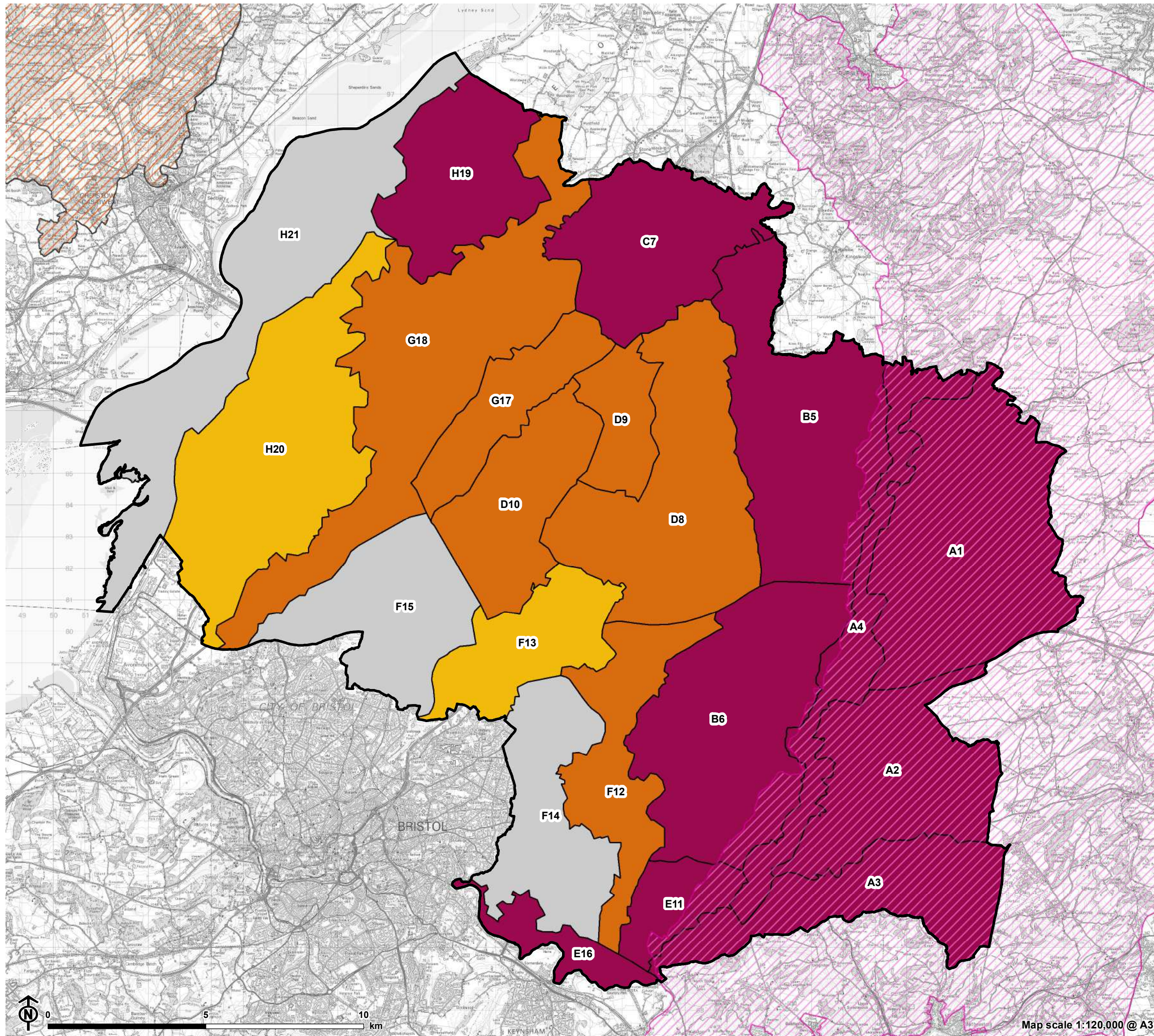
- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgey and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Piling Levels
- H21. Severn Shoreline and Estuary

Figure 3.3: Landscape sensitivity for future Band C (11ha to 15ha) solar energy development



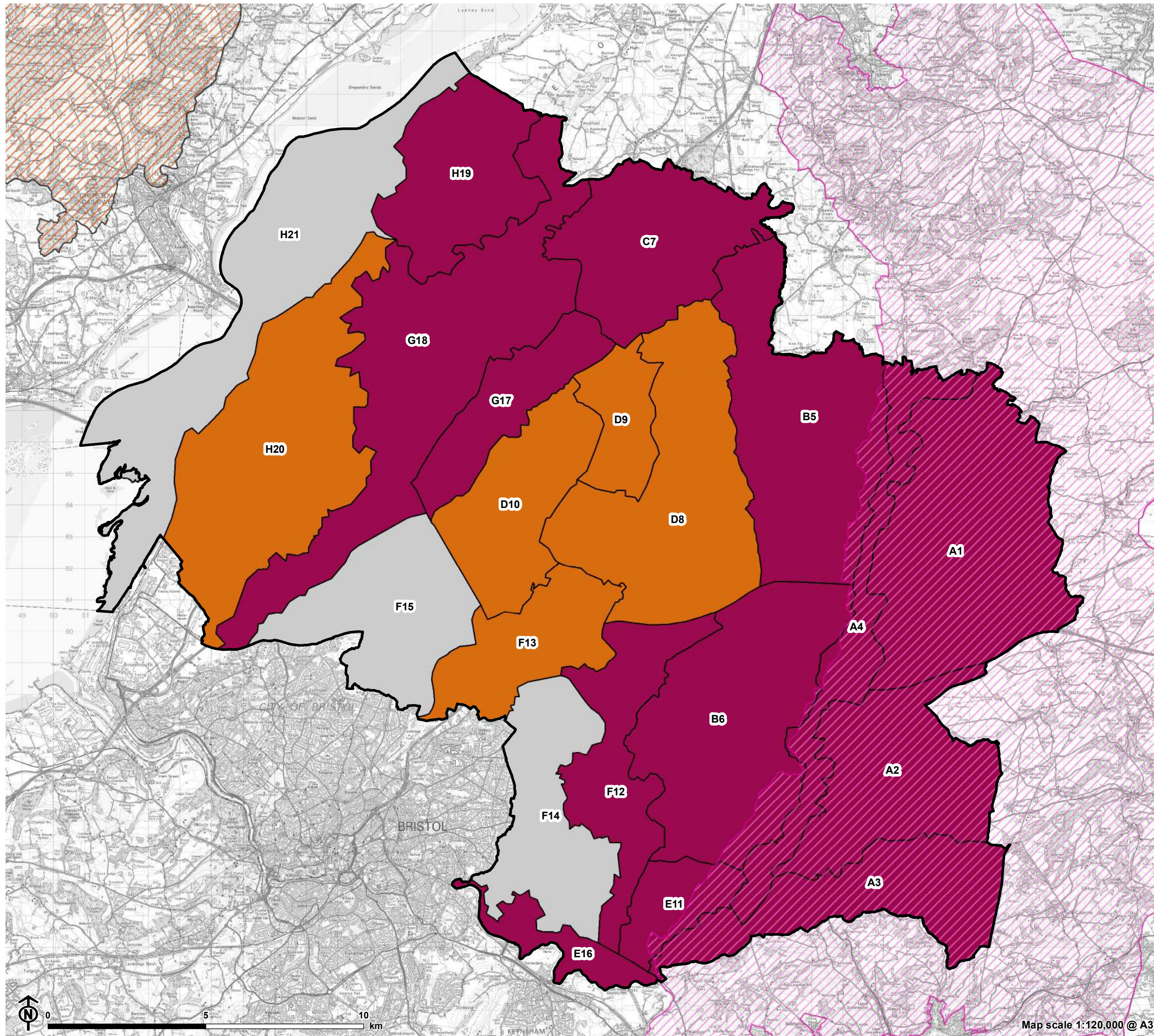
- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

Figure 3.4: Landscape sensitivity for future Band D (16ha to 30ha) solar energy development



- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

Figure 3.5: Landscape sensitivity for future Band E (31ha to 60ha) solar energy development



South Gloucestershire district boundary

**Area of Outstanding Natural Beauty**

- Cotswolds
- Wye Valley

**Landscape Sensitivity**

- Low
- Low - Moderate
- Moderate
- Moderate - High
- High

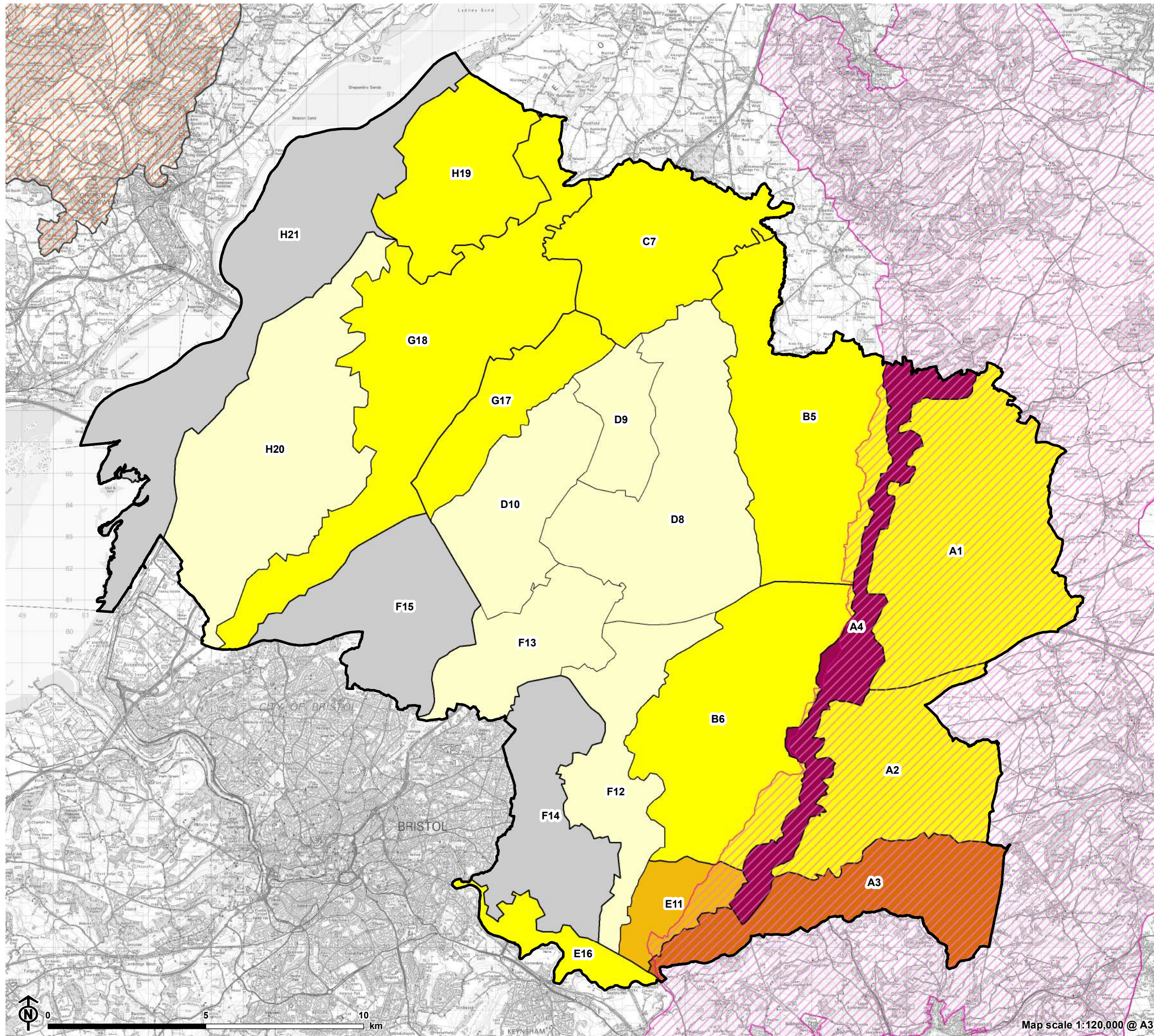
Areas scoped out of the assessment on landscape/technical grounds

**South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**

- A. Plateau and Scarp**
  - A1. Badminton Plateau
  - A2. Marshfield Plateau
  - A3. Ashwicke Ridges
  - A4. Cotswold Scarp
- B. Shallow Ridge**
  - B5. Wickwar Ridge and Vale
  - B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
  - C7. Falfield Vale
- D. Shallow Vale**
  - D8. Yate Vale
  - D9. Tytherington Plain
  - D10. Earthcott Vale
- E. Enclosed Valleys**
  - E11. Golden Valley
  - E16. Avon Valley
- F. Broad Valleys**
  - F12. Westerleigh Vale and Oldland Ridge
  - F13. Frome Valley
  - F14. Kingswood
  - F15. Patchway and Filton
- G. Undulating Ridge**
  - G17. Rudgeway and Tytherington Ridge
  - G18. Severn Ridges
- H. Estuary Shoreline and Levels**
  - H19. Oldbury Levels
  - H20. Pilning Levels
  - H21. Severn Shoreline and Estuary

Map scale 1:120,000 @ A3

Figure 3.6: Landscape sensitivity for future Band A (18 to 25m) wind energy development



South Gloucestershire district boundary

**Area of Outstanding Natural Beauty**

- Cotswolds
- Wye Valley

**Landscape Sensitivity**

- Low
- Low - Moderate
- Moderate
- Moderate - High
- High

Areas scoped out of the assessment on landscape/technical grounds

**South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**

**A. Plateau and Scarp**

- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp

**B. Shallow Ridge**

- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley

**C. Parkland Vale**

- C7. Falfield Vale

**D. Shallow Vale**

- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale

**E. Enclosed Valleys**

- E11. Golden Valley
- E16. Avon Valley

**F. Broad Valleys**

- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton

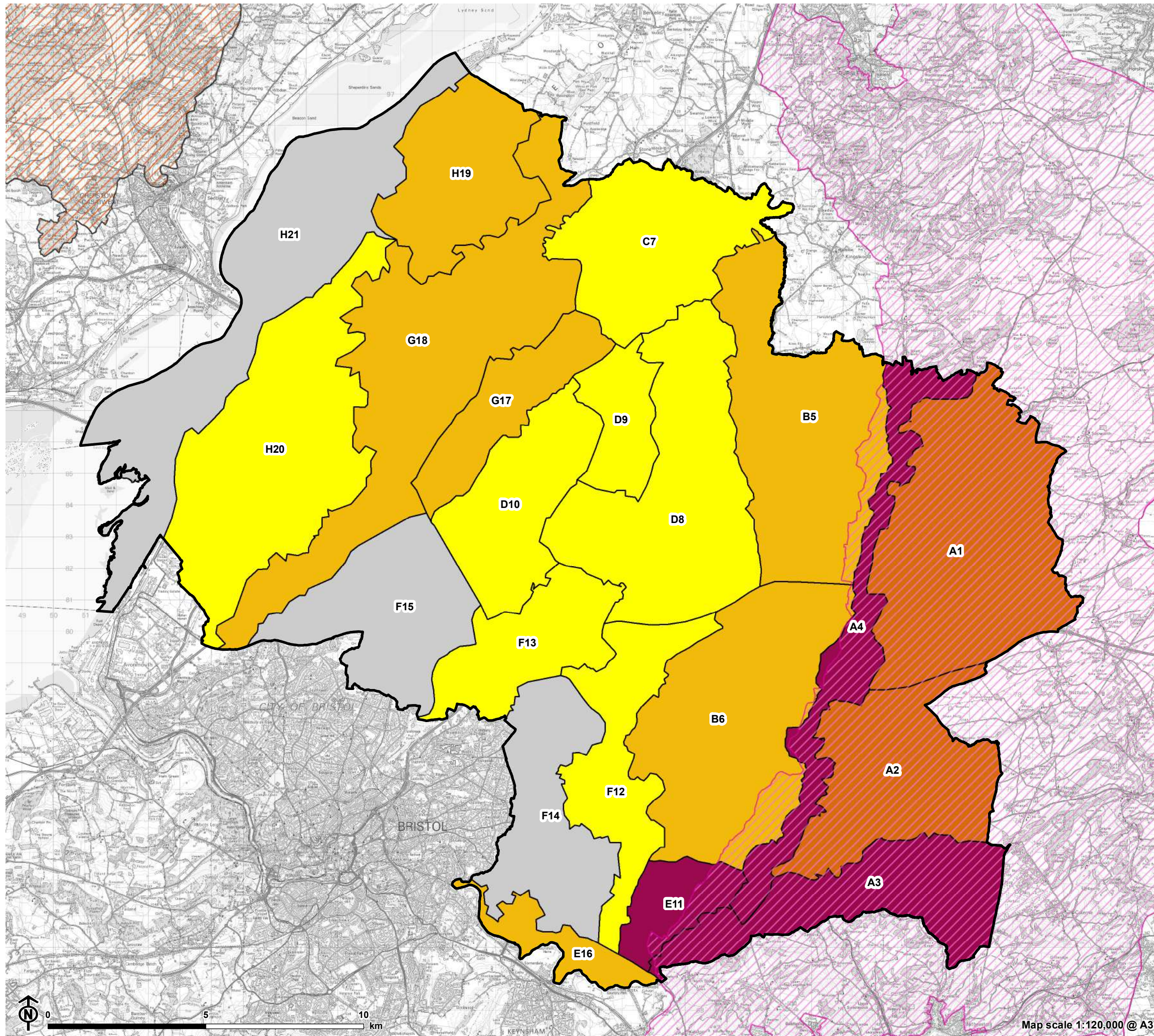
**G. Undulating Ridge**

- G17. Rudgey and Tytherington Ridge
- G18. Severn Ridges

**H. Estuary Shoreline and Levels**

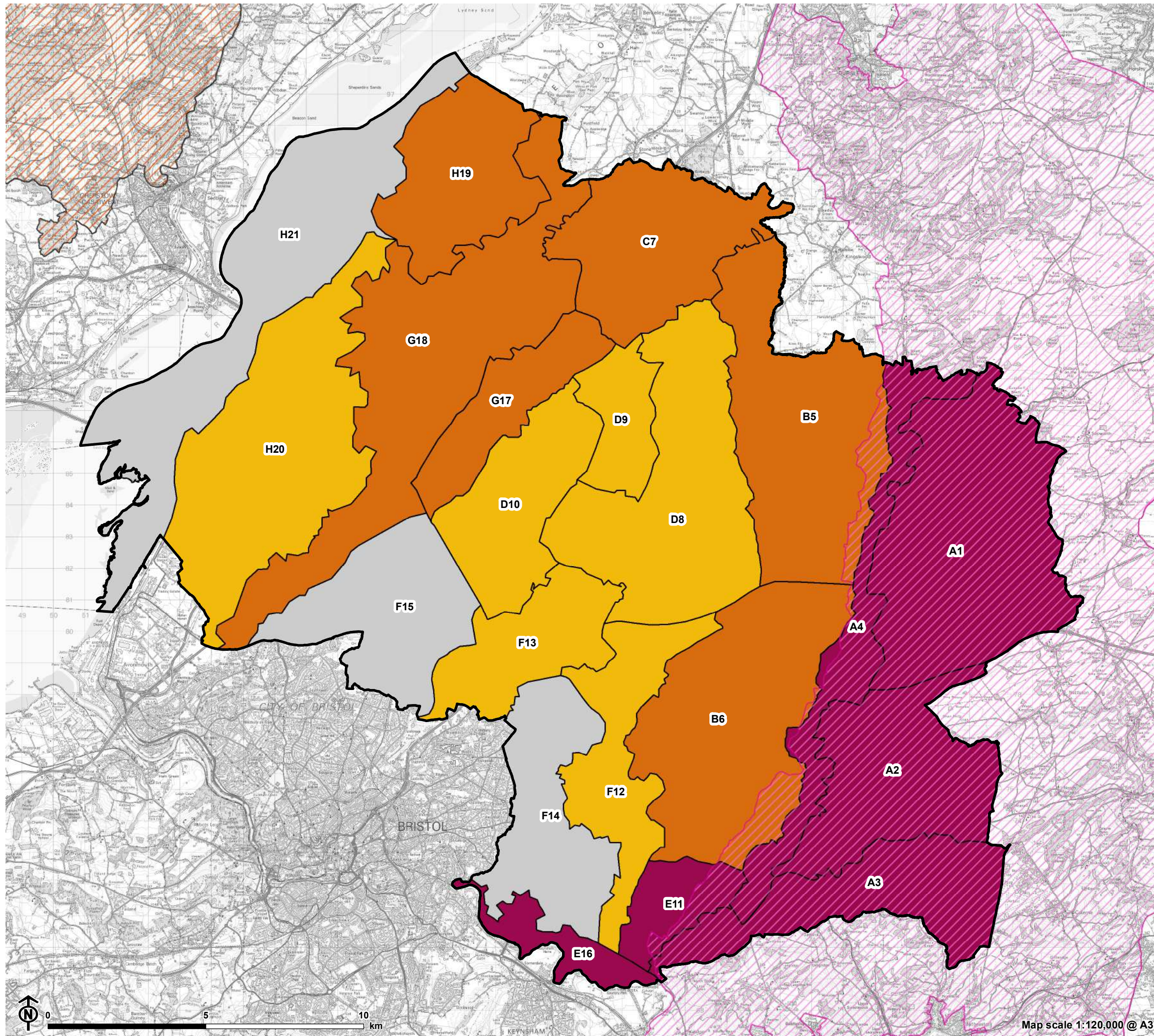
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

Figure 3.7: Landscape sensitivity for future Band B (26 to 60m) wind energy development



- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

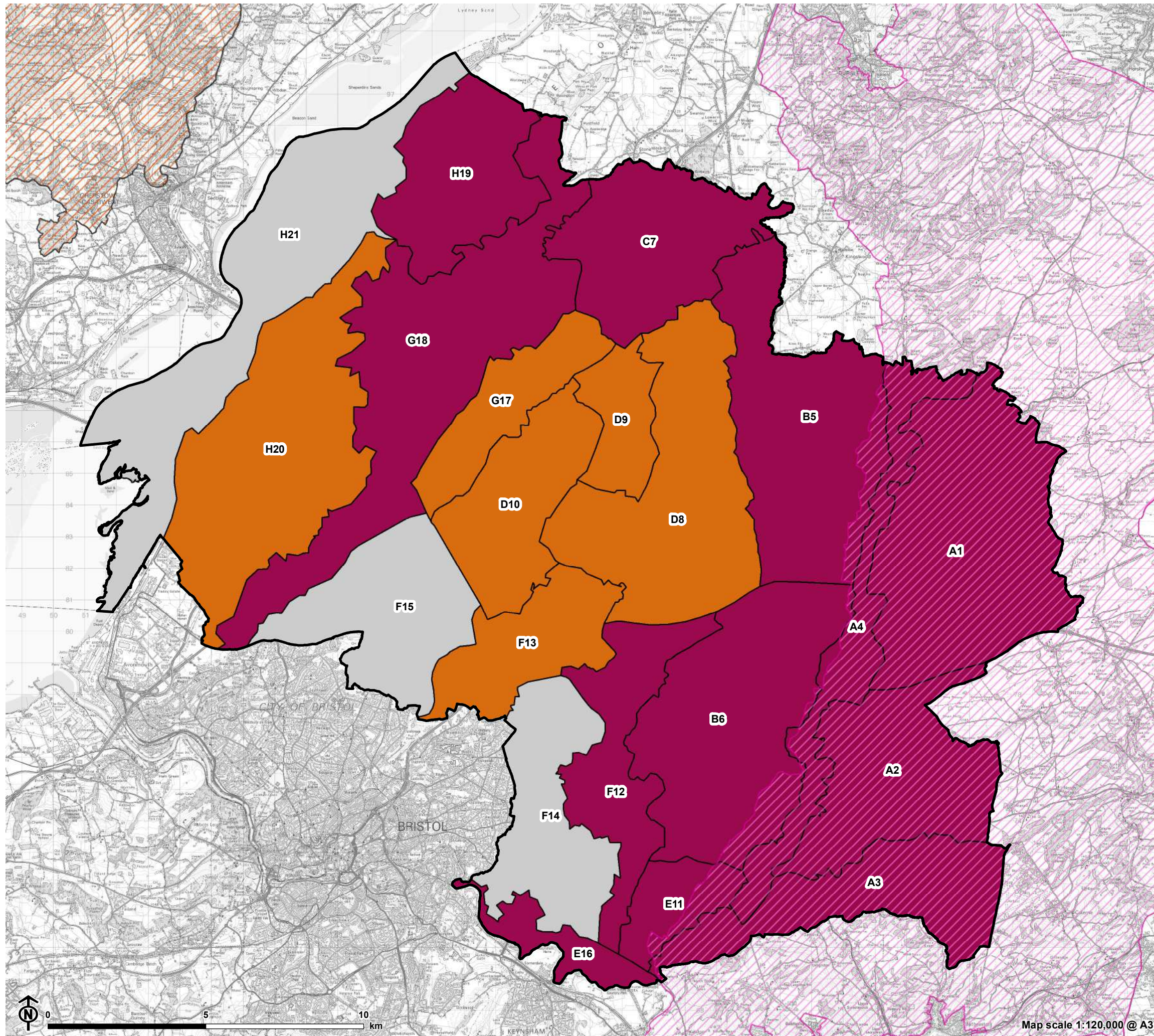
Figure 3.8: Landscape sensitivity for future Band C (61 to 100m) wind energy development



- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

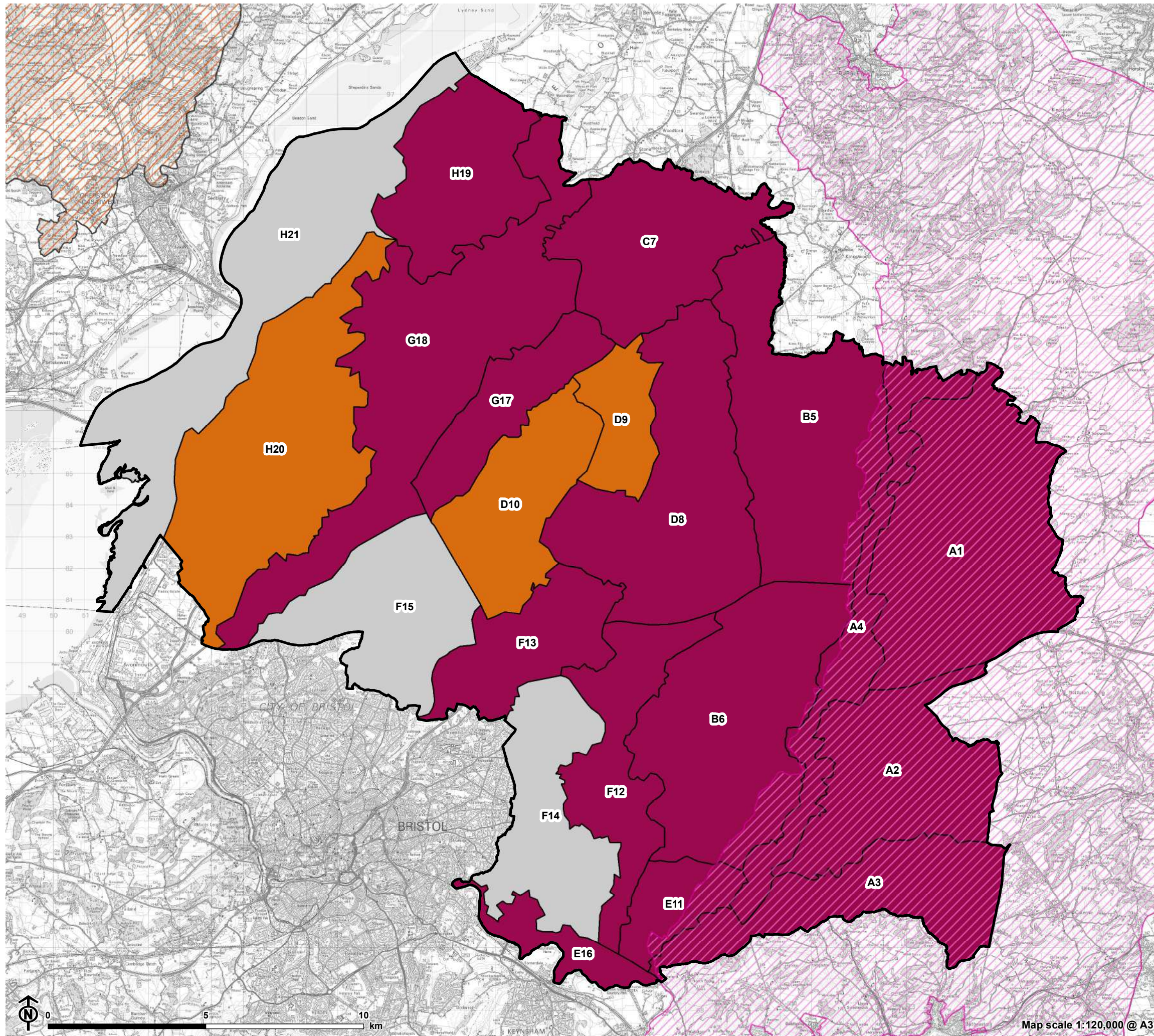


Figure 3.9: Landscape sensitivity for future Band D (101-120m) wind energy development



- South Gloucestershire district boundary
- Area of Outstanding Natural Beauty**
- Cotswolds
- Wye Valley
- Landscape Sensitivity**
- Low
- Low - Moderate
- Moderate
- Moderate - High
- High
- Areas scoped out of the assessment on landscape/technical grounds
- South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**
- A. Plateau and Scarp**
- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp
- B. Shallow Ridge**
- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley
- C. Parkland Vale**
- C7. Falfield Vale
- D. Shallow Vale**
- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale
- E. Enclosed Valleys**
- E11. Golden Valley
- E16. Avon Valley
- F. Broad Valleys**
- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton
- G. Undulating Ridge**
- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges
- H. Estuary Shoreline and Levels**
- H19. Oldbury Levels
- H20. Pilning Levels
- H21. Severn Shoreline and Estuary

Figure 3.10: Landscape sensitivity for future Band E (121-150m) wind energy development



South Gloucestershire district boundary

**Area of Outstanding Natural Beauty**

- Cotswolds
- Wye Valley

**Landscape Sensitivity**

- Low
- Low - Moderate
- Moderate
- Moderate - High
- High

Areas scoped out of the assessment on landscape/technical grounds

**South Gloucestershire Landscape Character Types and Areas (South Gloucestershire LCA 2014)**

**A. Plateau and Scarp**

- A1. Badminton Plateau
- A2. Marshfield Plateau
- A3. Ashwicke Ridges
- A4. Cotswold Scarp

**B. Shallow Ridge**

- B5. Wickwar Ridge and Vale
- B6. Pucklechurch Ridge and Boyd Valley

**C. Parkland Vale**

- C7. Falfield Vale

**D. Shallow Vale**

- D8. Yate Vale
- D9. Tytherington Plain
- D10. Earthcott Vale

**E. Enclosed Valleys**

- E11. Golden Valley
- E16. Avon Valley

**F. Broad Valleys**

- F12. Westerleigh Vale and Oldland Ridge
- F13. Frome Valley
- F14. Kingswood
- F15. Patchway and Filton

**G. Undulating Ridge**

- G17. Rudgeway and Tytherington Ridge
- G18. Severn Ridges

**H. Estuary Shoreline and Levels**

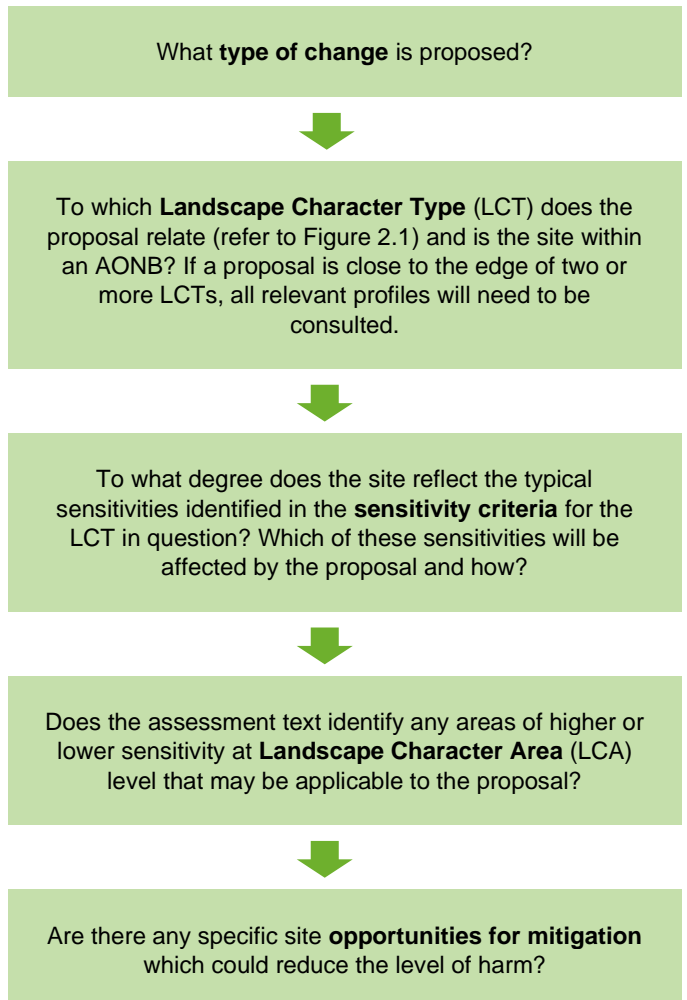
- H19. Oldbury Levels
- H20. Piling Levels
- H21. Severn Shoreline and Estuary

# Appendix A

## User Guide

### A guide to using this assessment

**A.1** The following flow chart should assist in using available information to shape proposals for renewable energy development and assist in assessing and appraising planning applications.



# Appendix B

## Data /information sources

### Key sources of information used to inform the study

- South Gloucestershire Landscape Character Assessment SPD (South Gloucestershire Council, 2014)
- The special qualities and spatial boundaries of the Cotswolds AONB, as outlined in the Management Plan
- The Cotswolds AONB Landscape Character Assessment (LDA, 2004)
- Nature Conservation designations (international, national, and local)
- City of Bath World Heritage Site Setting SPD
- South Gloucestershire Green Infrastructure: Guidance for New Development SPD (2021)

**B.1** In addition, the following table lists the main datasets collated and analysed in Geographic Information System (GIS) software as a key part of the evidence base for this study.

**Table B.1: GIS considered in the assessment**

GIS layer	Source
<b>Base maps</b>	
Local authority boundaries	Ordnance Survey
Ordnance Survey 1: 25K	South Gloucestershire Council
Ordnance Survey 1: 50K	South Gloucestershire Council
Ordnance Survey 1:250k	Ordnance Survey
Aerial imagery	ESRI
<b>Landscape</b>	
National Character Areas	Natural England
Areas of Outstanding Natural Beauty	Natural England
Agricultural Land Classification	Natural England
Light pollution	CPRE

GIS layer	Source
Tranquillity	CPRE
CORINE Land Cover	EEA
<b>Historic environment</b>	
Conservation areas	South Gloucestershire Council
Listed buildings	Historic England
Registered Parks and Gardens	Historic England
Scheduled Monuments	Historic England
Registered battlefields	Historic England
Locally listed buildings	South Gloucestershire Council
City of Bath World Heritage Site and Setting boundaries	South Gloucestershire Council
<b>Ecological environment</b>	
Sites of Nature Conservation Importance (SNCI)	South Gloucestershire Council
Priority Habitat Inventory (PHI)	Natural England
Local Nature Reserves (LNR)	Natural England
National Nature Reserves (NNR)	Natural England
Ramsar	Natural England
Special Areas of Conservation (SAC)	Natural England
Special Protection Areas (SPA)	Natural England
Sites of Special Scientific Interest (SSSI)	Natural England
Ancient Woodland Inventory (AWI)	Natural England
<b>Access and recreation</b>	
Country Parks	Natural England
National Trails	Natural England
National and Regional Cycle Routes	Sustrans
Ordnance Survey Open Greenspace	Ordnance Survey

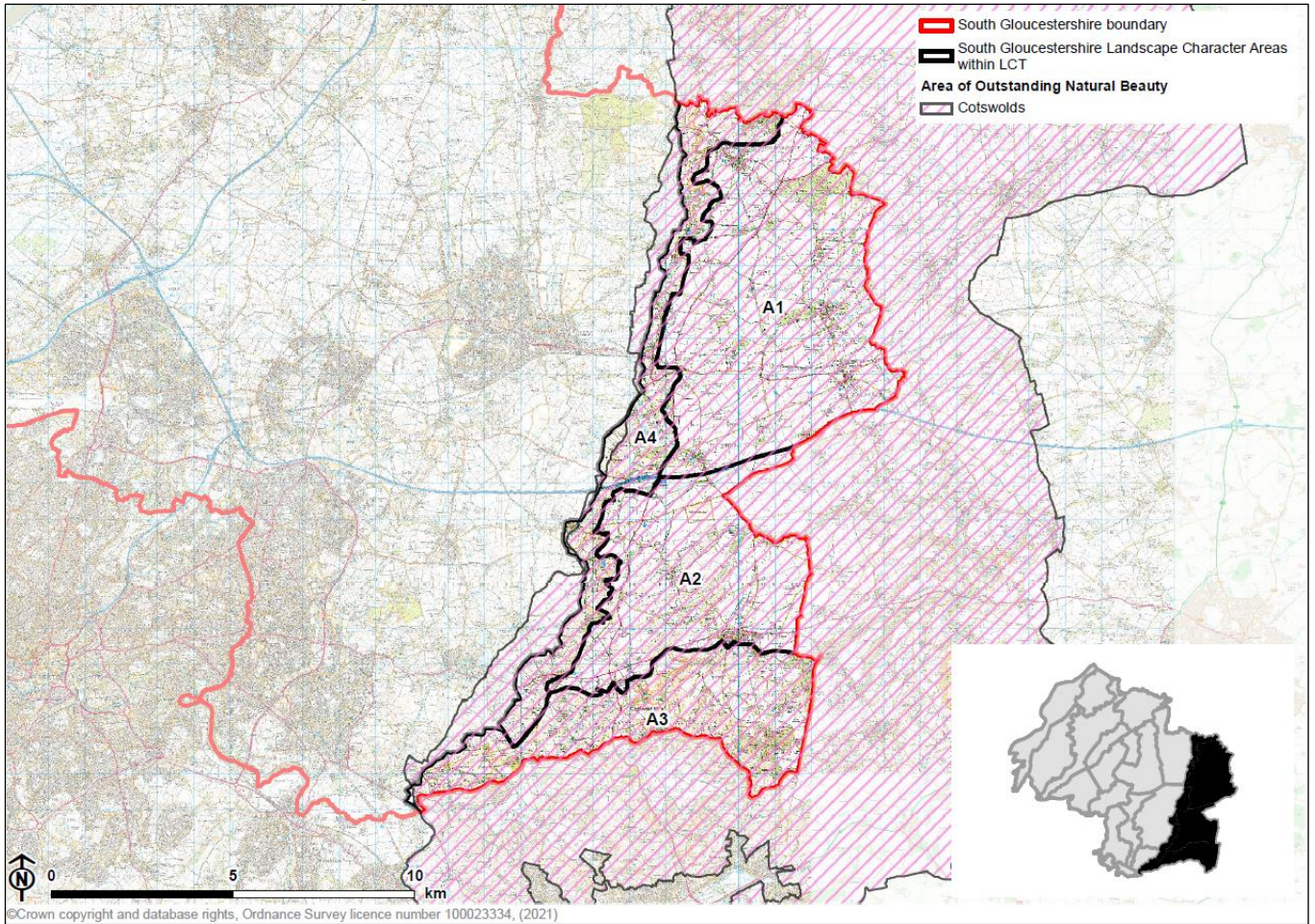
GIS layer	Source
CRoW Act Open Access Land / Open Country	Natural England
National Trust Land – Always Open / Limited Access	National Trust

## **Appendix C**

### **Landscape Sensitivity Assessment Profiles**

**Landscape Sensitivity  
Assessment Profiles for each  
LCT**

## LCT A: Plateau and Scarp



View south-west from Oakes Lane showing large scale agriculture, woodland and horsiculture surrounding Parks Farm (A1).



View south from Dunsdown Lane across gently undulating arable farmland, enclosed by hedgerows and traditional stone walls (A2).



View south-east from Cold Ashton showing pasture grazing on the slopes of the wooded and incised valley (A3).



View from B6 looking back to the ridgeline (A4) showing where the M4 and pylon line cross the landscape and the Hinton Turbine (A2).

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/enclosure)</b>	<ul style="list-style-type: none"> <li>A large-scale landform of rolling plateaux and dip slopes, becoming more complex in the south with rounded hills, ridges and incised valleys.</li> <li>The distinctive Cotswolds scarp marks the western boundary (LCA A4).</li> <li>The uplands are open and exposed, but woodland offers localised enclosure, notably in the incised valleys of St Catherine's Brook and Pibley Bottom (LCA A3).</li> <li>Human scale features include hedgerow trees, small woodlands, villages and farmsteads.</li> </ul>	M-H	M
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>Medium to large-scale regular arable fields are defined by traditional Cotswold stone walls, hedges and occasional fencing.</li> <li>Landcover is more mixed in LCA A3 and A4 where there is a greater prevalence of small-moderate sized irregular pasture fields.</li> <li>A landscape punctuated by mature trees, copses scattered woodland, and occasional traditional orchards, often associated with valley slopes, the scarp slope and parkland estates. Many woodlands are ancient, including Bodkin Hazel and Monkwood Valley (both designated as SSSIs).</li> <li>Calcareous and neutral grasslands are widespread, many are SSSIs (Monkwood Valley, Upton Coombe, St Catherine's Valley, Congrove Field and the Tumps).</li> <li>Limited settlement comprising villages, hamlets and scattered farm buildings, unified by the use of traditional Cotswold stone.</li> </ul>	M	M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>Field patterns include large areas of 18<sup>th</sup>-19<sup>th</sup> century parliamentary enclosure and remnant medieval enclosures.</li> <li>Historic parkland estates include Badminton Estate (grade I), Dodington House and Dyrham Park (both grade II*) and Ashwicke Hall (grade II), all RPGs.</li> <li>There is a scattering of prehistoric sites, including tumuli, barrows, prominent Iron Age hill forts on the Cotswold Scarp and a Roman Villa in Badminton Park (all Scheduled Monuments).</li> <li>The 1643 Registered Battlefield at Lansdown Hill lies in the south-west.</li> <li>Most settlements are designated as conservation areas.</li> </ul>	H	H
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>Expansive views are available across the plateau and from hilltops, with panoramic views from the Cotswolds scarp, including the OS viewpoint Togg Hill.</li> <li>In the southern valleys there is a greater sense of visual enclosure due to smaller field patterns, more varied topography and widespread woodland.</li> <li>The upland hills of the LCT, particularly the distinctive Cotswold Scarp (LCA A4) and steep sided Ashwicke Ridge (LCA A3) are noted as Visually Important Hillside<sup>1</sup>.</li> <li>Skylines are punctuated with church towers (such as Marshfield and Dyrham), the Monument to Lord Robert Edward Somerset and small woodlands and trees.</li> <li>Pylons crossing the LCT south of the M4 are intrusive features.</li> </ul>	M-H	M-H
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The area is largely within the Cotswolds AONB. Special qualities include the extensive use of Cotswold stone, open arable landscapes with big skies, flower-rich grasslands and the sense of rural tranquillity.</li> <li>The whole of the LCT has a strong traditional rural character, with high levels of tranquillity away from major transport routes.</li> <li>Parts of LCA A3 form part of the wider setting of the City of Bath World Heritage site<sup>2</sup> with several hills identified in viewpoints from within the WHS.</li> <li>The area is crossed by numerous public rights of way (including the Cotswold Way and the Limestone Link National Trails) and open access land is common.</li> <li>Major roads including the M4, A46, A420 and A431 and the south Wales to London railway cause localised audible and visual disruption.</li> </ul>	M-H	M-H

<sup>1</sup> South Gloucestershire Local Plan Core Strategy 2006-2027 Figure 1 Strategic Green Infrastructure Network

<sup>2</sup> City of Bath World Heritage Site Setting SPD (August 2014)



## Overall Assessment of Landscape Sensitivity: Solar PV developments

### Existing solar PV developments

There are no commercial solar PV developments within this LCA.

### Summary of overall landscape sensitivity

The large-scale landform and areas of flatter land enclosed by woodland or hedgerow boundaries and the presence of major transport routes could indicate a lower landscape sensitivity to solar PV developments. However, open and visually prominent slopes with landmark features or heritage assets, historic field patterns including remnant medieval enclosures, the mosaic of natural habitats including grasslands and woodlands, the frequency of historic features including stone-built villages and designed parklands, relative tranquillity and the scenic qualities of the landscape identified through its designation as part of the Cotswolds AONB, heighten levels of landscape sensitivity.

### Any variations in landscape sensitivity at the LCA level

The large-scale arable landscapes of LCAs A1 and A2 are bound by low hedges or stone walls meaning there is limited scope to screen solar PV developments. However localised areas of visual enclosure provided by woodland copses and undulations in the landform and occasional hedgerow boundaries mean that this landscape has slightly reduced landscape sensitivity to Band A solar PV developments.

In LCA A3 there is a prevalence of open and visually prominent slopes overlain with traditional pastoral fields and grassland habitats, therefore it has a slightly elevated landscape sensitivity to Band A solar PV developments (in comparison to LCAs A1 and A2).

LCA A4 would be highly sensitive to solar PV developments as the sloping landform of the Cotswolds Scarp is visually prominent and forms a distinctive skyline feature to the low-lying landscapes to the west, therefore it has a high landscape sensitivity to all scales of solar PV developments (A-E).

#### Landscape sensitivity scores for solar PV development in LCAs A1 and A2

<b>BAND A</b> (≤5ha)		<b>L-M</b>			
<b>BAND B</b> (6-10ha)				<b>M-H</b>	
<b>BAND C</b> (11-15ha)					<b>H</b>
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

#### Landscape sensitivity scores for solar PV development in LCA A3

<b>BAND A</b> (≤5ha)				<b>M-H</b>	
<b>BAND B</b> (6-10ha)				<b>M-H</b>	
<b>BAND C</b> (11-15ha)					<b>H</b>
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

#### Landscape sensitivity scores for new Solar PV development in LCA A4

<b>BAND A</b> (≤5ha)					<b>H</b>
<b>BAND B</b> (6-10ha)					<b>H</b>
<b>BAND C</b> (11-15ha)					<b>H</b>
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

## Overall Assessment of Landscape Sensitivity: Wind Energy Developments

### Existing wind energy developments

The 66m Hinton Turbine is located to the south of junction 18 of the M4 in LCA A2. A 15m (smaller than Band A) turbine is located at Marshfield School.

### Summary of overall landscape potential:

The large-scale plateau landform in the north of the LCT, large arable fields, and presence of existing man-made features such as major transport routes could indicate a lower sensitivity to wind energy development. However, the prominent slopes and distinctive skylines with landmark features and heritage assets, presence of human scale features (including hedgerow trees and copses and historic villages), historic field patterns including remnant medieval enclosures, mosaic of natural habitats including grasslands and woodlands, the frequency of historic features including stone-built villages and designed parklands, rural character, relative tranquillity and scenic qualities of the landscape identified through its designation as part of the Cotswolds AONB increases sensitivity to wind turbine development.

### Any variations in landscape sensitivity at the LCA level:

LCAs A1 and A2 have a slightly reduced landscape sensitivity to Band A wind energy developments in comparison to other areas in the LCT, due to the large and open scale of these LCAs.

The incised pastoral valleys of LCA A3 have a higher sensitivity to all developments due to the human scale and complex landform. Hillsides identified as important to the undeveloped setting of the City of Bath WHS would be highly sensitive to all bands of wind energy developments.

LCA A4 has a high sensitivity to wind energy developments of any scale (A-E) as the Cotswolds Scarp is visually prominent and forms a distinctive skyline feature to lower lying landscape to the west. Wind energy development in this location would be intrusive in views and compete with other landmark features on the ridgeline.

#### Landscape sensitivity scores for wind energy developments in LCA A1 and A2

BAND A (18-25m)		L-M			
BAND B (26-60m)				M-H	
BAND C (61-100m)					H
BAND D (101-120m)					H
BAND E (121-150m)					H

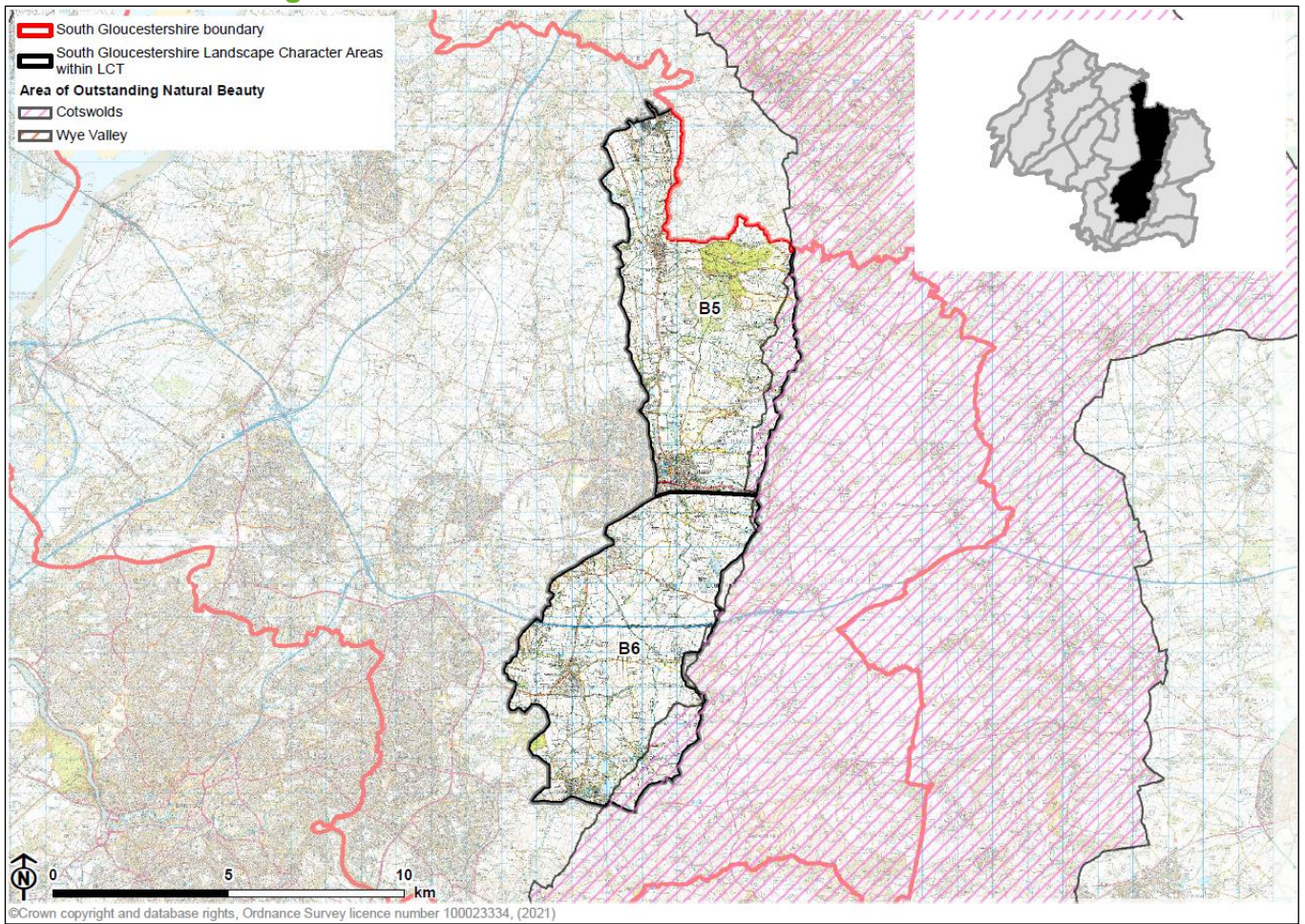
#### Landscape sensitivity scores for wind energy developments in LCA A3

BAND A (18-25m)				M-H	
BAND B (26-60m)					H
BAND C (61-100m)					H
BAND D (101-120m)					H
BAND E (121-150m)					H

#### Landscape sensitivity scores for wind energy developments in LCA A4

BAND A (18-25m)					H
BAND B (26-60m)					H
BAND C (61-100m)					H
BAND D (101-120m)					H
BAND E (121-150m)					H

## LCT B: Shallow Ridge



Views to the Parish Church of the Holy Trinity (Wickwar) LCA B5, and the Mounteneys and Cherry Rock turbines (in Gloucestershire).



View south-east from Churchend (B5), showing pasture and distant views to the turbines in Gloucestershire and Hawkesbury Monument.



Open flat arable fields north of Pucklechurch (B6) with distant views to LCA A4, showing the M4 pylons and Hinton and Wapley turbines.



View east to The Church of the Holy Trinity (Doynton, B6), showing pasture, traditional stone walls and the Cotswolds ridge (A4).

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/enclosure)</b>	<ul style="list-style-type: none"> <li>A large-scale undulating plateaux and vale landform, lying between the Wickwar and Pucklechurch ridges to the west, and the Cotswolds scarp to the east (LCT A).</li> <li>The LCT is crossed by the broad river valleys of the Little Avon, Frome, Boyd, Feltham Brook and their tributaries, some of which are more steeply incised.</li> <li>High hedgerows and woodlands, particularly in the north, provide enclosure.</li> <li>The landscape is more open and large-scale in the south, where the plateau is overlain with larger fields and has less tree cover and unenclosed commons.</li> <li>Human scale features include small copses, hedgerow trees, villages and hamlets.</li> </ul>	M-H	M
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>Landuse is a mixture of arable and pasture, interspersed with unenclosed commons including Sodbury, Inglestone and Hawkesbury Commons.</li> <li>Field are irregular and small to medium in scale in the north but larger and more regular in the south, particularly on the plateau.</li> <li>Fields are bound by hedges in varied condition, with low clipped hedges defining larger arable fields, and stone walls near settlement.</li> <li>Small woodlands and copses are scattered across the LCT, with more extensive tree cover in the north, including Lower Woods, a large deciduous woodland much of which is ancient in origin, designated as a SSSI and Nature Reserve.</li> <li>Calcareous and neutral grasslands extend across the elevated ridges and in the open commons, often identified as SNCIs and as part of the Lower Wood SSSI.</li> <li>Several watercourses are identified as SNCIs for their bankside habitats.</li> <li>Settlement includes the market town of Chipping Sodbury, with villages, hamlets and farms dispersed across the area.</li> <li>Suburban land uses include golf courses and horsiculture near Chipping Sodbury.</li> <li>Former and some active industrial sites are scattered across the LCT, including limestone quarries, claypits, brickworks and collieries.</li> </ul>	M	M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>Historic field patterns include ancient unenclosed commons, fields of medieval origin (including assarts in LCA A5), post-medieval enclosure of medieval parkland, and 18th-19th century parliamentary enclosure.</li> <li>Modern field amalgamation is more common north of the M4.</li> <li>Scheduled Monuments include a prehistoric bowl barrow, an Iron Age settlement, three Roman Villas and a medieval stone bridge at Wickwar.</li> <li>Chipping Sodbury, Wickwar, Pucklechurch, Dyrham, Doynton and Siston Court, are designated conservation areas with a concentration of listed buildings.</li> </ul>	M	M
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>The Cotswolds scarp to the east and the Wickwar and Pucklechurch ridges to the west form prominent backdrops to lower-lying areas and provide panoramic views and are noted as Visually Important Hillsides<sup>1</sup>.</li> <li>The LCT provides part of the rural setting to the scarp and the Cotswolds AONB.</li> <li>There are expansive views from elevated locations and in areas with larger scale field patterns (more common in the south).</li> <li>Wickwar, situated on the upper valley slopes, and church towers in the historic villages are distinctive features in the landscape.</li> <li>Pylons and wind turbines (including those outside of the LCT) are visually intrusive on skylines.</li> </ul>	M	M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The eastern edge of the LCT lies within the Cotswolds AONB, valued for its special qualities include views to the escarpment, flower-rich grasslands and rural tranquillity.</li> <li>The north (LCA 5) is a relatively remote and tranquil rural landscape, but further south, the M4, major roads and rail lines, cause audible and visual intrusion.</li> <li>Quarries, golf courses, powerlines, solar farms, wind turbines and settlement edges dilute the rural quality of the landscape.</li> <li>Open commons and public rights of way including the Jubilee Way, Monarch's Way and Frome Valley Walkway are valued recreational resources.</li> </ul>	M	M

<sup>1</sup> South Gloucestershire Local Plan Core Strategy 2006-2027 Figure 1 Strategic Green Infrastructure Network

## Overall Assessment of Landscape Sensitivity: Solar PV developments

### Current development

There is a Band C (12 ha) solar development to the south of the M4 (LCA B6).

### Summary of overall landscape sensitivity

The flatter plateau landforms within the LCT, larger scale modern field patterns, the visual enclosure provided by high hedges, woodlands or tree cover, disused mineral workings and major transport routes, could indicate a lower landscape sensitivity to solar PV developments. However, areas with medieval field patterns, more open fields with low hedgerow boundaries, the extensive semi-natural grassland and woodland habitats, historic settlements, the recreational value of the LCT, the visual prominence of the ridges and the traditional rural character of the landscape which provides a setting to the Cotswolds AONB all increase landscape sensitivity to solar PV developments.

Solar PV development should be avoided within the Cotswolds AONB or in those areas that are directly overlooked or visually prominent in near views from the Cotswold Scarp along the eastern edge of the LCT. Similarly, solar PV development should avoid west facing slopes along the Wickwar and Pucklechurch ridge along the western boundary of the LCT where it would be visually prominent.

Areas of common land should not be considered for Solar PV developments of any scale due to their open character, historic origin, extensive semi-natural grassland and woodland habitats and their value as publicly accessible land.

There may be localised opportunities for solar PV developments on former industrial sites (including former mineral works and quarries) or along transport routes, where there is adequate screening.

### Any variations in landscape sensitivity at the LCA level:

There are no significant variations in landscape sensitivity score to solar PV development through this LCT.

### Landscape sensitivity to solar PV development in LCT B

<b>BAND A</b> (≤5ha)		<b>L-M</b>			
<b>BAND B</b> (6-10ha)			<b>M</b>		
<b>BAND C</b> (11-15ha)				<b>M-H</b>	
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

**Overall Assessment of Landscape Sensitivity: Wind Energy Developments**

**Current development**

There is a Band B (37m) Wapley wind turbine in LCA B6. To the north of the LCT in Gloucestershire two Band C (77m) turbines, the Mounteneys and Cherry Rock Wind Turbines, are visible from the north of the LCT particularly around Inglestone Common and the village of Churchend. The Band C Hinton Turbine to the east of the LCT is visible from the M4.

**Summary of overall landscape potential:**

The flatter plateau landforms within the LCT, larger scale modern field patterns, major transport infrastructure routes and skylines marked by vertical features such as pylons could indicate a lower sensitivity to wind energy development, predominantly in LCA B6. However, the more incised river valleys, of the LCT, areas of medieval field patterns, the setting the landscape provides to conservation areas, historic church towers, human scale features such as woodland copes and small villages, semi-natural habitats, the traditional agricultural character of much of the LCT and the strong visual relationship with the Cotswolds Ridge within the Cotswolds AONB to the east, heighten levels of sensitivity.

Wind energy developments should be avoided within the Cotswolds AONB, where they would be visually intrusive in views from the distinctive Cotswolds escarpment. Development also should be avoided in those areas outside the AONB, that are directly overlooked or visually prominent in near views from the Cotswold Scarp along the eastern edge of the LCT.

Similarly, development should be avoided on west facing slopes along the Wickwar and Pucklechurch ridge along the western boundary of the LCT where it would be visually prominent.

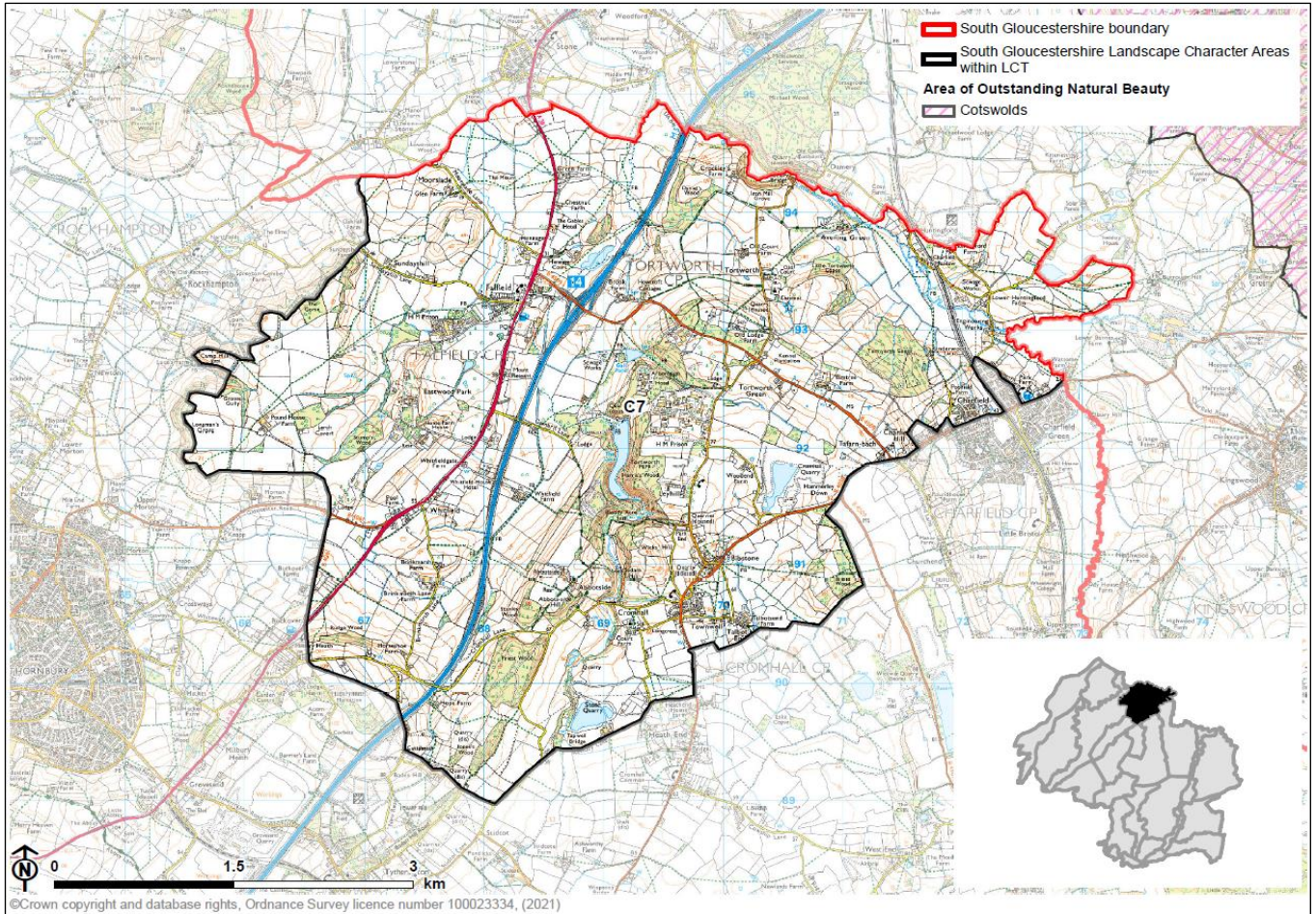
**Any variations in landscape sensitivity at the LCA level:**

There are no significant variations in landscape sensitivity score to wind energy development thought this LCT.

**Landscape sensitivity to wind energy development in LCT B**

<b>BAND A</b> (18-25m)		<b>L-M</b>			
<b>BAND B</b> (26-60m)			<b>M</b>		
<b>BAND C</b> (61-100m)				<b>M-H</b>	
<b>BAND D</b> (101-120m)					<b>H</b>
<b>BAND E</b> (121-150m)					<b>H</b>

## LCT C: Parkland Vale



View east across open pasture towards the Severn Ridge and the Cotswold scarp beyond.



View west across fields adjacent to the M5, with large scale arable fields, and the Wye Valley ridgeline beyond.



View east across Tortworth Park, with the grade II\* Church of St Leonard set within specimen trees, beneath the Cotswold Scarp.



Cromhall village set within pasture fields in the south of the LCT.

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/ enclosure)</b>	<ul style="list-style-type: none"> <li>A large-scale, bowl-shaped vale enclosed by gently sloping ground, rising to a scarp edge to the west, and the Severn Ridge to the east.</li> <li>The Severn Ridge curves diagonally through this low-lying undulating area, with slightly higher land to the east and south of it.</li> <li>A small-scale steep sided valley cuts south through Tortworth Park.</li> <li>Across the agricultural landscape there is a sense of openness, although large woodland blocks and linear woodlands provide a sense of enclosure.</li> <li>Human-scale features include hedgerows, hedgerow and in-field trees, farmsteads, churches and parkland features including mature specimen trees, boundary walls, gateways and estate cottages.</li> </ul>	M	M-H
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>Field patterns vary, with larger, regular arable fields covering much of the area, including the estates with smaller irregular pasture fields on slopes and around settlements. East of the A38 fields are small with more regular boundaries.</li> <li>Fields are defined by dense, low clipped hedges with sporadic hedgerow trees.</li> <li>Extensive woodland cover (much of which is ancient) includes large deciduous woodlands and linear woodlands along the Severn Ridge and watercourses, with many areas designated SNCIs.</li> <li>Ornamental parkland with frequent woodlands, specimen trees and ornamental lakes are associated with the Eastwood and Tortworth estates.</li> <li>Several quarries are designated as SSSIs for their geological significance.</li> <li>Settlement is limited with small, nucleated villages and scattered individual farmsteads, along with two large prison complexes on either side of the M5.</li> </ul>	M-H	M-H
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>The HLC indicates that field enclosure is largely of medieval to late medieval origin.</li> <li>Ornamental landscapes are associated with parkland estates at Eastwood Park and Tortworth Court (grade II* Registered Park and Garden).</li> <li>Scheduled Monuments include two Iron-Age hill forts and the site of a Roman villa near Cromhall.</li> <li>Heritage assets include the chest tombs at the Church of St Andrew (grade I listed) and the Church of St Leonard (grade II* listed).</li> <li>The Tortworth Chestnut is an 800 year old veteran tree near St Leonard's Church.</li> <li>Tytherington village is protected by a conservation area.</li> </ul>	M-H	M-H
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>From the hills and ridgelines surrounding the Falfield Vale, there are long views to surrounding ridges, occasionally limited by the extensive woodland cover.</li> <li>Views from lower elevations are generally contained by woodland and hedgerows.</li> <li>The wooded Severn Ridge and the Cotswold Scarp (outside the LCA) form distinctive skylines in views from the west and east respectively.</li> <li>The northern settlement edge of Charfield (LCT B) is generally well integrated into the landscape, set behind a dense structure of hedgerows and trees.</li> <li>Pylon corridors to the south of the area (around Cromhall) form prominent built features within this generally low-lying, gently undulating landscape.</li> </ul>	M	M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The LCT has a strong parkland character, combining designed landscapes, tree and woodland patterns and a strong vernacular of historic buildings.</li> <li>Large-scale prison buildings and agricultural sheds introduce discordant elements into the rural landscape.</li> <li>Public rights of way cross the area, often linking settlements and dispersed farms.</li> <li>The M5 and A38 run north-south in parallel through the LCT, introducing traffic noise in an otherwise tranquil area.</li> <li>Away from the prison sites and the major roads, there is a strongly rural character, with dark night skies.</li> </ul>	M	M



**Overall Assessment of Landscape Sensitivity: Solar PV developments**

**Current development**

There are currently no commercial scale solar developments in this LCT.

**Summary of overall landscape sensitivity**

The larger scale and gently undulating landform of the lowland vale, extensive woodland and tree cover which provides enclosure, larger scale field pattern, presence of existing modern development (including two prison complexes, a major road corridor and pylons) could indicate lower sensitivity to solar PV development. However, areas with historic field patterns, extensive semi-natural woodland (much of it ancient), the undeveloped wooded skyline of the Severn Ridge, strong parkland character and traditional rural character (away from the motorway corridor) could indicate higher sensitivity to solar PV development.

There may be opportunities for carefully sited Band A and B solar PV developments adjacent to areas of existing development (e.g. prison sites or along the M5/A38 corridor) or in enclosed areas where development could be screened by undulations in the landform and/or existing vegetation.

**Any variations in landscape sensitivity at the LCA level:**

There is only one LCA in this LCT.

**Landscape sensitivity to solar PV development in LCT C**

<b>BAND A</b> (≤5ha)		<b>L-M</b>			
<b>BAND B</b> (6-10ha)		<b>L-M</b>			
<b>BAND C</b> (11-15ha)				<b>M-H</b>	
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

## Overall Assessment of Landscape Sensitivity: Wind Energy Developments

### Current development

There is a single 67m (Band C) wind turbine at Pound House Farm in the west of the LCT.

### Summary of overall landscape potential:

The larger scale and undulating landform of the lowland vale, presence of existing man-made features such as major roads, pylons and large prison buildings, could indicate lower sensitivity. However, the presence of smaller human scale features (including trees, hedgerows, churches and traditional farmsteads), areas with smaller scale historic field patterns, historic parkland, extensive semi-natural woodland, prominent skylines along the Severn Ridge, the strong parkland and rural character all increase sensitivity to wind energy development.

There may be opportunities to accommodate smaller wind turbines (up to lower end Band B) utilising undulations in topography and in association with existing development such as the prison buildings, or along the M5/A38 corridor, to aid their integration into the landscape.

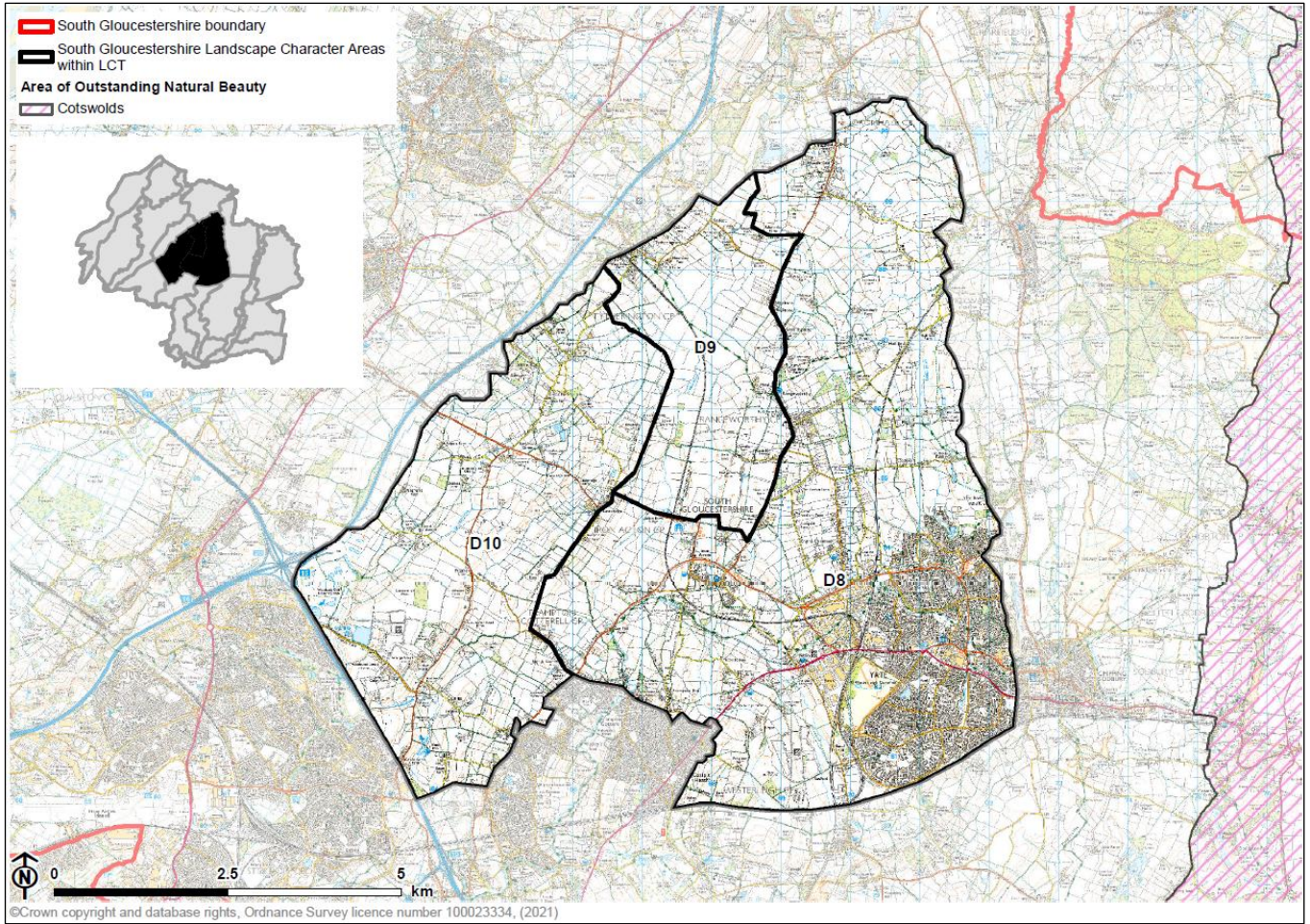
### Any variations in landscape sensitivity at the LCA level:

There is only one LCA in this LCT. The east of the LCT may be more sensitive to wind energy development due to its stronger visual relationship with the scarp within the Cotswold AONB.

### Landscape sensitivity to wind energy development in LCT C

<b>BAND A</b> (18-25m)		L-M			
<b>BAND B</b> (26-60m)		L-M			
<b>BAND C</b> (61-100m)				M-H	
<b>BAND D</b> (101-120m)					H
<b>BAND E</b> (121-150m)					H

## LCT D: Shallow Vale



A rural lane and high hedgerows enclose small regular fields around Engine Common (D8).



View east from near Coalpit Heath (D8) showing urbanising features including pylons and industrial buildings.



View east from near Tytherington (D9) across arable fields enclosed by low hedges and ditches.



View south-east across arable fields to the three Eathcott Green Band D turbines (D10).

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/ enclosure)</b>	<ul style="list-style-type: none"> <li>■ A broad and gently sloping vale landform which flattens along the floodplain of the Ladden Brook south of Tutherington.</li> <li>■ The landform becomes more undulating in the south west where cut by shallow brook valleys.</li> <li>■ Fields bound by clipped or overgrown hedgerows and mature hedgerow trees offer a high degree of enclosure in the south and east.</li> <li>■ The north and west are more open in character, due to larger scale fields bounded by drainage ditches or low hedges with fewer mature trees.</li> <li>■ Human scale features include hedgerows, hedgerow trees and farmhouses.</li> </ul>	L-M	M
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>■ A varied field pattern of regular and irregular medium scale fields of arable and pasture, with larger, amalgamated fields in the north and west.</li> <li>■ Distinct regular shaped, small to medium sized fields occur at Engine Common and Rangeworthy north of Yate.</li> <li>■ Equine land use is common, often concentrated in the south of the LCT.</li> <li>■ Occasional small woodlands are scattered across the LCT, sometimes reflecting coal mine batches or areas of historic quarrying.</li> <li>■ Scattered semi-natural habitats include neutral grasslands, extensive areas of floodplain grazing marsh along the Ladden Brook and scattered traditional orchards.</li> <li>■ Settlement is limited across much of the LCT, with small villages and scattered farmsteads, often built in traditional stone. However, the south is dominated by the large town of Yate with an associated industrial estate to the west (LCA D8).</li> <li>■ The urban edge of Bradley Stoke and Frampton Cotterell are located on the southern boundary with urban-edge land uses extending into the LCT, including the Woodlands Golf and Country Club.</li> </ul>	L-M	L-M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>■ The HLC identifies large areas of medieval field patterns as well as medieval or earlier enclosure of wet grassland.</li> <li>■ Post-medieval field patterns include those formed by the enclosure of medieval parkland, as well as large areas of 18<sup>th</sup> to 19<sup>th</sup> century parliamentary enclosure.</li> <li>■ Scheduled Monuments are limited, with a medieval moated site and medieval standing near Iron Acton and the remains of the Roman town of Wickwar.</li> <li>■ The villages of Iron Acton, Winterbourne, Tytherington and Chipping Sodbury (partially within the LCT) are conservation areas.</li> </ul>	L-M	L-M
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>■ Far-reaching views are limited due to the gentle landform and mature vegetation.</li> <li>■ Some long-distance views are possible across fields bound by ditches and low hedges in LCA D9.</li> <li>■ The gentle slopes of the Wickwar and Pucklechurch ridges form a rural backdrop to easterly views, with the distant Cotswolds escarpment visible on the skyline.</li> <li>■ The towers of the Church of St Mary (Yate), St Peter's Church (Frampton Cotterell) and the Church of St Michael (Winterbourne) form landmarks on the skyline.</li> <li>■ Power lines cross the LCT and converge at a substation to the north of Latteridge forming dominant vertical features within local views.</li> <li>■ The settlement edge of adjacent towns including Frampton Cotterell, Bradley Stoke, as well as parts of Yate are visually intrusive on the LCT.</li> </ul>	L-M	L-M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>■ Much of the landscape retains its traditional agricultural character.</li> <li>■ Road and rail infrastructure surrounding and crossing the LCT (including the M4, M5 and A432) disrupt the tranquillity of the landscape.</li> <li>■ Modern settlements, industrial estates, powerlines and solar farms, concentrated in the south of the LCT are urbanising features in the otherwise rural landscape.</li> <li>■ The use of pony tape and other equestrian features detracts from the area's traditional farming practices in places.</li> <li>■ The area is crossed by public rights of way including the Frome Valley Walkway and Jubilee Way and contains the open access area Westerleigh Common as well as the publicly accessible Monks Pool and Bradley Brook LNR.</li> </ul>	L-M	L-M

## Overall Assessment of Landscape Sensitivity: Solar PV Developments

### Existing and consented solar PV developments

Two Band D solar farms are located in the south of the LCT at Grange Court Farm (LCA D10) and Rodford (LCA D8) whilst a third larger 105ha farm (Larks Farm) has been granted planning permission near Ichington (straddling LCA D9 and D10).

### Summary of overall landscape sensitivity

The lowland landform, which is often large in scale with modern field patterns, limited historic features, modern settlements and non-traditional land uses adjacent to urban areas, major transport infrastructure and overhead powerlines crossing the area, and limited views could indicate a lower sensitivity to solar PV developments. However, areas with historic field patterns, semi-natural habitats, historic settlements, and the traditional rural agricultural character particularly in the north, heighten sensitivity to solar PV developments.

More open areas of the LCT have an increased landscape sensitivity to solar PV developments, particularly in the north and west, most notably around Tytherington, where the landscape is notably open with field patterns often larger in scale and field boundaries marked by ditches or low hedges with few hedgerow trees.

### Any variations in landscape sensitivity at the LCA level:

There are no variations in overall landscape sensitivity score to solar PV developments in this LCT.

### Landscape sensitivity to solar PV development in LCT D

<b>BAND A</b> (≤5ha)	L				
<b>BAND B</b> (6-10ha)		L-M			
<b>BAND C</b> (11-15ha)			M		
<b>BAND D</b> (16-30ha)				M-H	
<b>BAND E</b> (31-60ha)				M-H	

**Overall Assessment of Landscape Sensitivity: Wind Energy Developments**

**Existing wind energy developments**

Three 100m tall turbines (Band D) are situated northeast of Earthcott Green (LCA D10).

**Summary of overall landscape potential:**

The lowland landform which is often large in scale with modern field patterns, limited historic features, modern settlements and the urban influence of non-traditional land uses, major transport infrastructure, overhead powerlines crossing the area, and limited views could indicate a lower sensitivity to wind energy developments. However, areas with historic field patterns, historic settlements, distinctive church towers on skylines and the rural agricultural character particularly in the north heightens sensitivity to wind energy developments.

**Any variations in landscape sensitivity at the LCA level:**

LCA D8 has a slightly high sensitivity to larger (Band E) wind energy development, due to its smaller, human scale features, including a small-scale field pattern and hedgerow trees, in contrast to LCAs D9 and D10 which have a larger scale and are influenced by modern development (including the turbines and pylons).

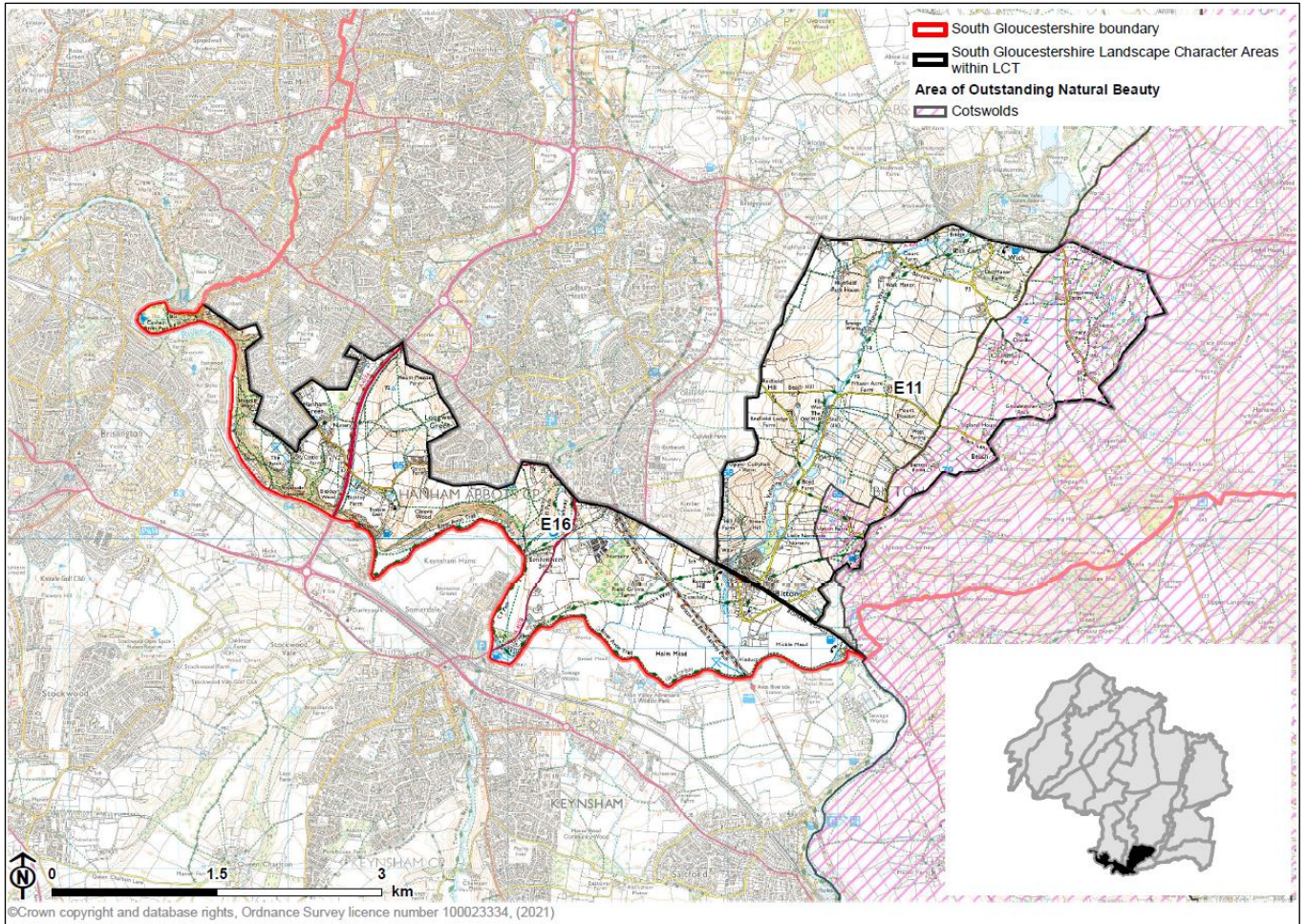
**Landscape sensitivity to wind energy development in LCA D8**

<b>BAND A</b> (18-25m)	L				
<b>BAND B</b> (26-60m)		L-M			
<b>BAND C</b> (61-100m)			M		
<b>BAND D</b> (101-120m)				M-H	
<b>BAND E</b> (121-150m)					H

**Landscape sensitivity to wind energy development in LCAs D9 and D10**

<b>BAND A</b> (18-25m)	L				
<b>BAND B</b> (26-60m)		L-M			
<b>BAND C</b> (61-100m)			M		
<b>BAND D</b> (101-120m)				M-H	
<b>BAND E</b> (121-150m)				M-H	

## LCT E: Enclosed Valleys



View east from the rural lane Beech Hill (E11) across fields enclosed with high hedges, to Hanging Hill (A3).



View to Colharbor Farm within the AONB, showing horse pasture on the sloping fields with mature trees marking a stream to the left (E11).



View from Mount Pleasant, across semi-improved grassland, showing dense hedgerows and strong visual connections to Bristol (E16).



View to Barrow Hill, showing horsiculture and hedgerow boundaries (E16).

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/ enclosure)</b>	<ul style="list-style-type: none"> <li>The valleys of the meandering River Avon (LCA E16) and Boyd (LCA E11) enclosed by steep valley sides, becoming gentler in the upper reach of the Boyd.</li> <li>A framework of linear woodlands, hedgerows and trees provide enclosure.</li> <li>The broad Avon floodplain in the east of E16 and upper slopes of the Boyd in E11 are more open.</li> <li>A human scale landscape of hedgerows, mature trees and farmhouses.</li> </ul>	M	M-H
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>Mixed agricultural land use of arable and pasture, with pasture dominating the Avon floodplain (LCA E16) and arable on upper slopes of LCA E11.</li> <li>Horse pasture is concentrated on the valley floor or around settlements.</li> <li>A mixed pattern of regular and irregular fields, small to medium in scale on steeper slopes and larger scale on the Avon floodplain.</li> <li>Field boundaries include occasional stone walls and overgrown, laid or clipped hedgerows, sometimes replaced with fencing and often containing mature trees.</li> <li>Scattered small woodlands and tree lines, with larger deciduous woodland on the steep slopes (E16), much of which is ancient, some designated as SSSIs or LNRs.</li> <li>Calcareous grasslands characterise upper slopes, with lowland meadow and floodplain grazing marsh near the Avon, and occasional traditional orchards.</li> <li>Settlement is limited to villages and hamlets and scattered farms linked by rural lanes, often sunken with high hedges.</li> <li>The settlement edge of Bristol and major roads exert an urban influence the edge of the LCT, with urban edge land uses extending into the LCT.</li> </ul>	M	M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>Most fields are of late medieval origin, and the HLC identifies areas of medieval or earlier enclosure of wet grasslands along the rivers, as well as localised ancient unenclosed commons. There is some modern field amalgamation in the north.</li> <li>Scheduled Monuments are limited to a Bowl Barrow of Late Neolithic to Bronze Age origin and a Medieval enclosure, both situated near Bitton.</li> <li>Scattered listed buildings including grade II* listed buildings associated with Hanham Court and the grade I listed Wick Court and Church of St Mary in Bitton.</li> <li>The historic cores of Hanham Abbots, Bitton, Upton Cheyney and Beech are conservation areas, and contain many listed buildings.</li> <li>Relics of industrial activity line the Avon, including the disused railway, wharfs and lock gates, the Dramway, and the ruins of a copper smelting works at Conham.</li> <li>Evidence of past mining and quarrying is visible on the valley slopes.</li> </ul>	M-H	M-H
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>Extensive views across the valleys are available from upper valley slopes, including views to the urban edge of Bristol from the Oldland Ridge.</li> <li>There is a strong visual relationship with the escarpments of the Cotswolds AONB to the east, particularly from LCA E11.</li> <li>Hedgerows and woodland provide a strong sense of visual enclosure within the valleys, notably in tributaries of the Boyd, limiting long distance views.</li> <li>The tower of the Church of St Mary at Bitton is locally distinctive on skylines.</li> <li>Skylines are generally undeveloped, except for an overhead powerline crossing the Avon Valley.</li> </ul>	M	M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The east of the LCT lies within the Cotswolds AONB (E11) and shares many of its special qualities including views to the escarpment and traditional villages.</li> <li>The landscape retains a sense of rural tranquillity despite its proximity to Bristol and major trunk roads which cross the LCT.</li> <li>Urban fringe land uses associated with the settlement edge of Bristol detract from the otherwise rural character of the valleys.</li> <li>Numerous public rights of way including Monarchs Way, the River Avon Trail, the Community Forest Path, the Bristol and Bath Railway Path, and the river itself, contributing to the areas' high recreational value.</li> </ul>	M-H	M-H



**Overall Assessment of Landscape Sensitivity: Solar PV developments**

**Summary of overall landscape sensitivity**

The visually prominent valley slopes, the presence of medieval (or older) field patterns, valued semi-natural deciduous woodland and grassland habitats (including two SSSIs), historic settlements, the LCT's partial inclusion within and visual relationship with the Cotswolds AONB, recreational value and the rural character of the landscape could indicate a higher sensitivity to solar PV developments. However, the flatter landform of the valley floors and enclosure provided by woodland, hedgerows and trees, and the strong influence of the urban edge of Bristol, could indicate lower sensitivity.

Fields enclosed by hedgerows or woodland on flat or very gently sloping land may have some capacity to support small Band A solar PV developments. However, the steeply sloping valley sides have localised visual prominence and therefore would not be appropriate for solar PV development of any scale.

**Any variations in landscape sensitivity at the LCA level:**

LCA E11 has a higher landscape sensitivity to Band A and Band B solar PV developments due to its partial inclusion within and strong visual relationship with the Cotswolds AONB. This area expresses many of the special qualities of the Cotswolds AONB, including views to and from the escarpment, villages with traditional vernacular and frequent public rights of way. There may however be some opportunities for carefully sited smaller scale solar PV developments on the valley floor where suitably screened by tall hedges and trees.

LCA E16 has a slightly lower landscape sensitivity to smaller solar PV developments due to its larger-scale and flatter landform across the floodplain, its enclosed character due to the prevalence of linear woodlands, and the more pronounced urban influence of Bristol.

**Landscape sensitivity to solar PV development in LCA E11**

<b>BAND A</b> (≤5ha)		<b>L-M</b>			
<b>BAND B</b> (6-10ha)				<b>M-H</b>	
<b>BAND C</b> (11-15ha)					<b>H</b>
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

**Landscape sensitivity to solar PV development in LCA E16**

<b>BAND A</b> (≤5ha)	<b>L</b>				
<b>BAND B</b> (6-10ha)			<b>M</b>		
<b>BAND C</b> (11-15ha)					<b>H</b>
<b>BAND D</b> (16-30ha)					<b>H</b>
<b>BAND E</b> (31-60ha)					<b>H</b>

## Overall Assessment of Landscape Sensitivity: Wind Energy Developments

### Summary of overall landscape potential:

The human scale landscape with small to medium size medieval fields, the importance of the area as a rural setting to traditional settlements, undeveloped skylines, numerous public rights of way and the rural tranquillity of the area could indicate higher sensitivity to wind energy developments. However, larger scale field patterns and flatter, more open land (such as the floodplain of the River Avon in LCA E16) could indicate a lower sensitivity to wind energy development.

### Any variations in landscape sensitivity at the LCA level:

LCA E11 has a higher landscape sensitive to Band A and B wind energy developments due to its partial inclusion within and strong visual relationship with the Cotswolds AONB. This area expresses many of the special qualities of the Cotswolds AONB, including views to and from the escarpment, villages with traditional vernacular and frequent public rights of way.

LCA 16 has a slightly lower landscape sensitivity to smaller wind energy developments due to its larger-scale and flatter landform across the floodplain, and the more pronounced urban influence of Bristol.

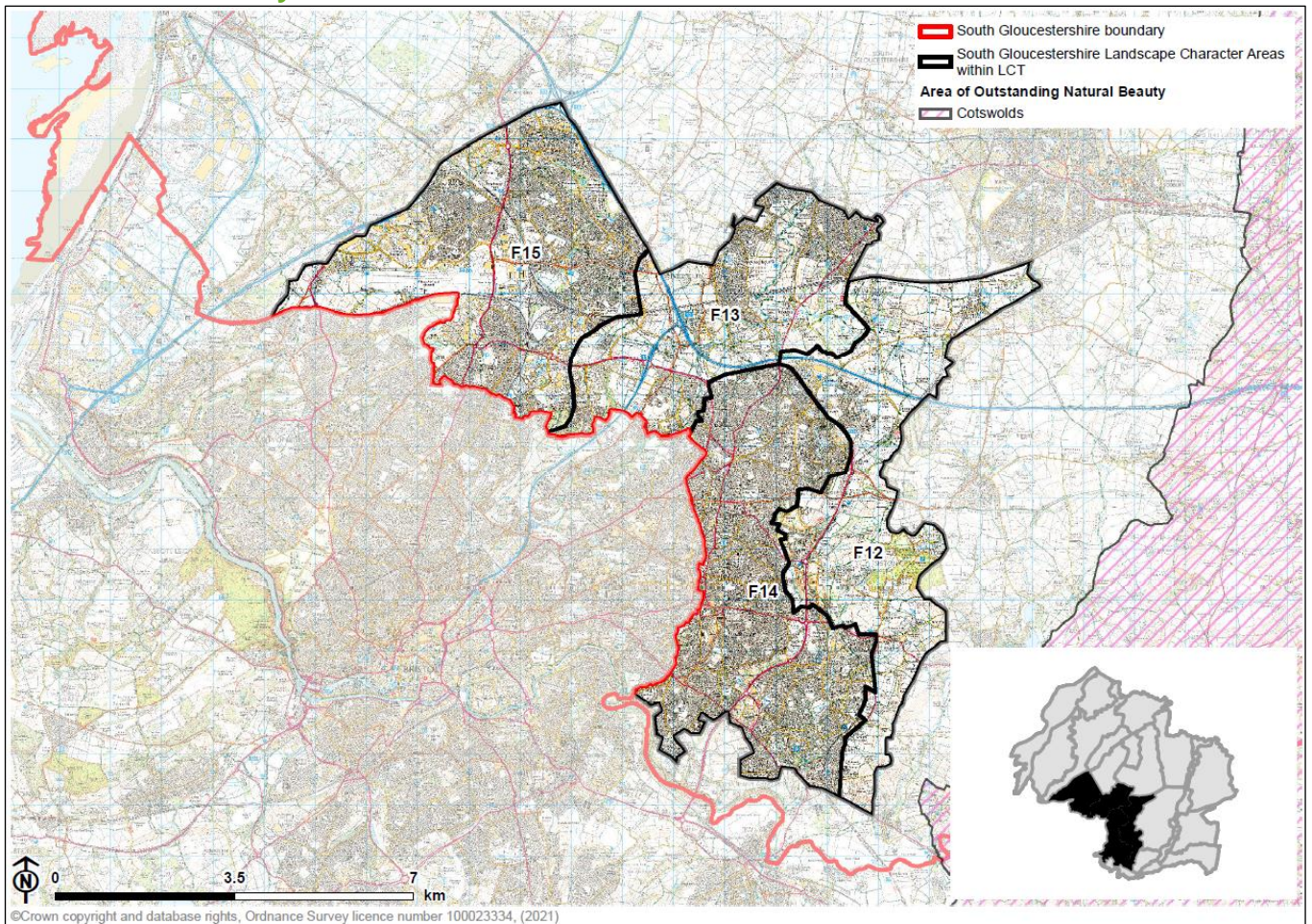
### Landscape sensitivity to wind energy developments in LCA E11

BAND A (18-25m)			M		
BAND B (26-60m)					H
BAND C (61-100m)					H
BAND D (101-120m)					H
BAND E (121-150m)					H

### Landscape sensitivity to wind energy developments in LCA E16

BAND A (18-25m)		L-M			
BAND B (26-60m)			M		
BAND C (61-100m)					H
BAND D (101-120m)					H
BAND E (121-150m)					H

## LCT F: Broad Valleys



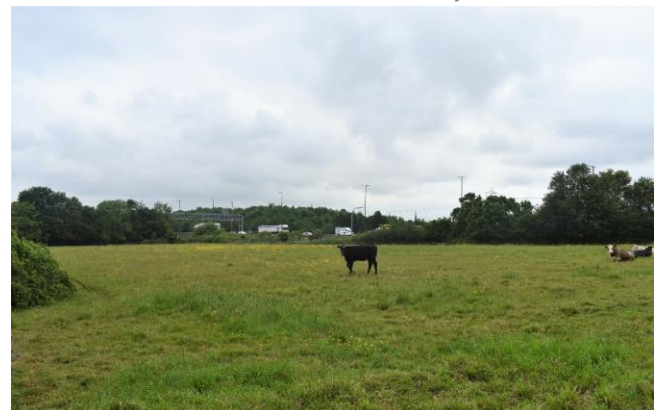
View south west from the Oakland Ridge over undulating fields towards Bristol.



View east from Winterbourne with the Huckford Viaduct and sloping fields on either side of the wooded Frome Valley.



View across gently sloping grassland fields set within Overscourt Wood in LCA F12.



Enclosed pasture fields adjacent to the M4 motorway in the north of LCA F13.

## Assessment of landscape sensitivity to renewable energy development

The Broad Valleys LCT is a diverse combination of agricultural land and urban built areas on the edge of Bristol. The assessment below considers those areas outside the urban area which are suitable for renewable energy development.

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/ enclosure)</b>	<ul style="list-style-type: none"> <li>A gently rolling valley landscape, contained to the east by the Pucklechurch and Oldland Ridge.</li> <li>The shallow valleys of the River Frome, Bradley Brook and Folly Brook tributaries create gentle undulations in the landform.</li> <li>The wooded character of the Frome Valley (LCA 13) creates a sense of enclosure, whilst the fields to the east (LCA 12) and commons are more open.</li> <li>A human-scale landscape of small fields with hedgerows, pockets of common land, small woodlands, villages, and scattered farms.</li> </ul>	L-M	M
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>The urban edge of Bristol heavily influences the remaining open farmland of the LCT, and mixed suburban land uses are common, including paddocks, nurseries, recreation grounds, storage compounds and golf courses.</li> <li>Remaining rural areas comprise a mix of medium sized pasture and arable fields. Smaller fields are located near settlements.</li> <li>Field boundaries comprise hedgerows (clipped and overgrown) or post and wire fencing, with stone walls near settlements.</li> <li>Areas of common land are characterised by acidic grasslands and include Siston Common, Rodway Hill, Webbs Heath and Lyde Green Common.</li> <li>Woodland cover is often associated with older settlements and commons (notably at Overscourt Wood). Riparian woodland lines the brook valleys.</li> <li>Winterbourne railway cutting SSSI is designated for its geological significance.</li> <li>A dispersed settlement pattern of villages and farms, with larger settlements north of the M4 (Winterbourne, Frampton Cotterell and Coalpit Heath).</li> <li>Major roads including the M4 and M32 segment the LCT while winding lanes cross rural areas in the east.</li> </ul>	M	M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>The HLC indicates field patterns are mainly medieval to late medieval.</li> <li>Historic assets are limited to remnants of the coal industry, with the collieries at Brandy Bottom and Ram Hill designated as Scheduled Monuments and an Iron Age hillfort at Bury Hill Camp (also a Scheduled Monument).</li> <li>A few listed buildings are scattered across the LCT, including the grade I listed Siston Court and St James' Great Church, Westerleigh.</li> <li>The settlements of Frenchay, Hambrook, and Siston include conservation areas.</li> </ul>	L-M	L-M
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>The Pucklechurch and Oldland Ridge (beyond the LCT's eastern boundary) forms a visually prominent linear skyline feature in views from the urban edge.</li> <li>The small, hedgerow-bound fields of the Westerleigh Vale (LCA 12) provide a rural backdrop to views from Bristol.</li> <li>The church spire at Warmley and a number of railway viaducts form distinctive landmark in the Westerleigh Vale and Frome Valley respectively.</li> <li>Powerlines cross skylines across the LCT.</li> </ul>	M	M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The landscape is strongly influenced by the urban conurbation to the west, recent urban expansion and its industrial history.</li> <li>Mixed non-traditional land uses on the urban edge reinforces the suburban character felt across much of the LCT, although pockets of rural character remain around Winterbourne and Frampton Cotterell.</li> <li>Distant traffic noise from the major transport corridors is heard across much of the LCT, however pockets of tranquillity exist within the parks and woodland.</li> <li>Public rights of way including The Frome Valley Walkway and Community Forest Path, as well as areas of common land are valued recreational resources.</li> </ul>	L-M	L-M

**Overall Assessment of Landscape Sensitivity: Solar PV developments**

**Current development**

There is an existing 2ha (Band A) solar farm in LCA 13 between the M4 and A4174 (north east of Frenchay).

**Summary of overall landscape sensitivity**

The gently rolling landform, proximity to urban areas, and presence of residential, commercial and industrial development could indicate a lower sensitivity to solar PV development. However, the woodland habitats, areas of common land (with grassland habitats), remaining medieval field patterns, and visually prominent ridgelines which form a rural backdrop to views from Bristol, could indicate a higher sensitivity to solar PV development.

There may be some opportunity for solar PV developments adjacent to existing developments, for example along the M4/M32 corridors, and on the larger scale fields to the north, utilising undulations in topography and existing vegetation to screen developments.

**Any variations in landscape sensitivity at the LCA level:**

LCA F12 would have a higher sensitivity to solar PV development due to the intact medieval field patterns around settlements, frequent areas of common land, sloping landform associated with the Pucklechurch Ridge and the rural setting the area provides to views east from Bristol.

**Landscape sensitivity to solar PV development in LCA F12**

<b>BAND A</b> (≤5ha)		L-M			
<b>BAND B</b> (6-10ha)		L-M			
<b>BAND C</b> (11-15ha)			M		
<b>BAND D</b> (16-30ha)				M-H	
<b>BAND E</b> (31-60 ha)					H

**Landscape sensitivity to solar PV development in LCA F13**

<b>BAND A</b> (≤5ha)	L				
<b>BAND B</b> (6-10ha)		L-M			
<b>BAND C</b> (11-15ha)		L-M			
<b>BAND D</b> (16-30ha)			M		
<b>BAND E</b> (31-60 ha)				M-H	

## Overall Assessment of Landscape Sensitivity: Wind Energy Developments

### Current development

There are currently no wind energy developments in this LCT.

### Summary of overall landscape potential:

The gently rolling landform, extensive human activity and modern development including major roads, pylons and residential, commercial and industrial development as well as suburban land uses on the urban edge, could indicate a lower sensitivity to wind energy development. However, the presence of human scale features in some rural areas (including trees, houses, recreational facilities and dispersed farms) could indicate a higher sensitivity to wind energy development.

There may be some opportunity for small (Band A or Band B) turbines to be located near existing industrial development, along transport corridors or adjacent to large scale buildings at UWE university campus.

### Any variations in landscape sensitivity at the LCA level:

LCA F12 would have higher sensitivity to large scale (Band D and Band E) wind energy development due the sloping landform associated with the Pucklechurch Ridge, density of human scale features, remaining areas of rural character and the rural setting these areas provide in views east from Bristol.

LCA F13 has slightly lower sensitivity to larger scale (Band D) wind energy development due to its more urban character, extensive development and associated infrastructure.

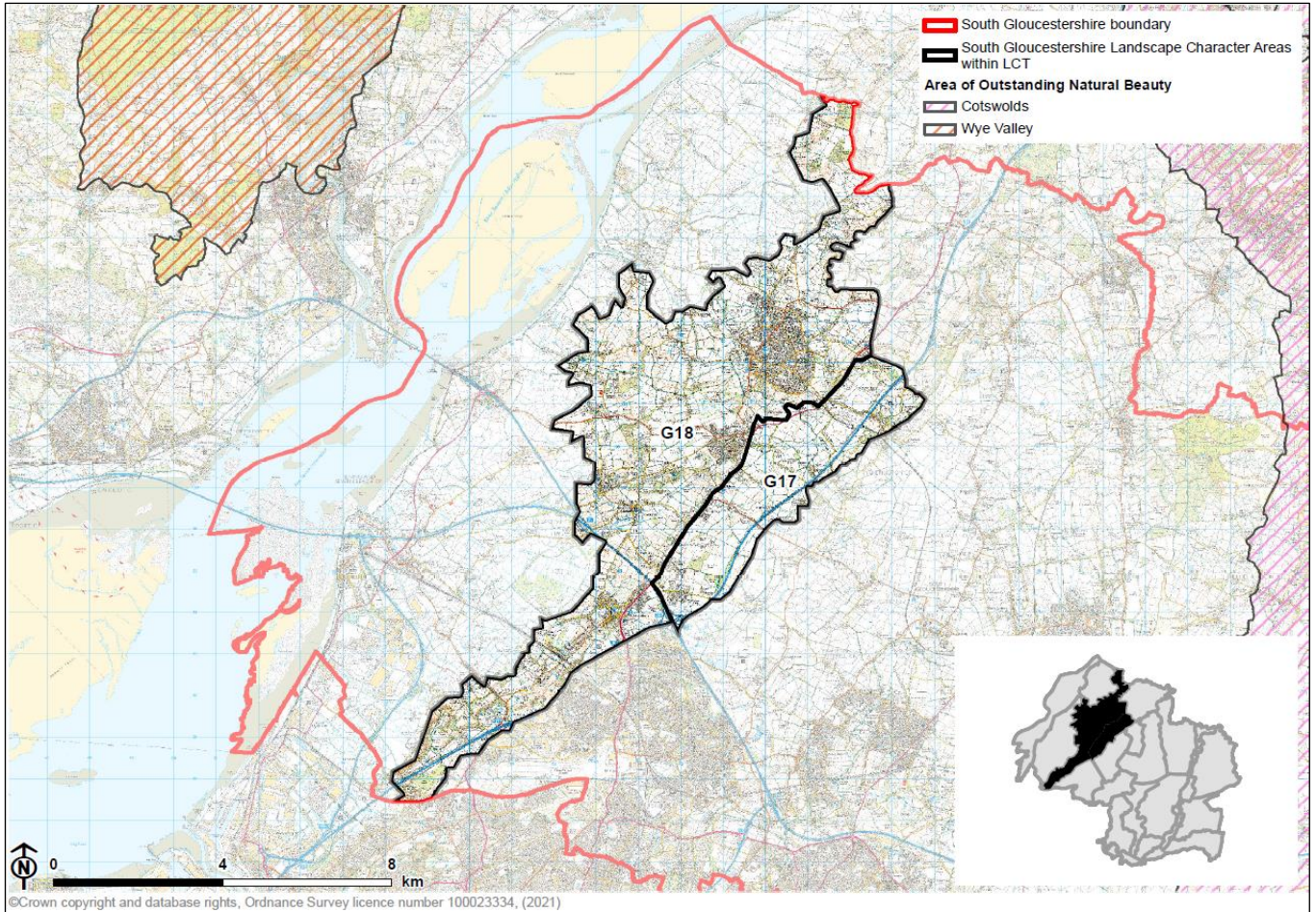
### Landscape sensitivity to wind energy development in LCA F12

<b>BAND A</b> (18-25m)	L				
<b>BAND B</b> (26-60m)		L-M			
<b>BAND C</b> (61-100m)			M		
<b>BAND D</b> (101-120m)					H
<b>BAND E</b> (121-150m)					H

### Landscape sensitivity to wind energy development in LCA F13

<b>BAND A</b> (18-25m)	L				
<b>BAND B</b> (26-60m)		L-M			
<b>BAND C</b> (61-100m)			M		
<b>BAND D</b> (101-120m)				M-H	
<b>BAND E</b> (121-150m)					H

## LCT G: Undulating Ridge



Arable field enclosed by hedgerows, adjacent to the M5 motorway in LCA G17.



View east across flat pastoral fields towards Thornbury, with the tower of St Marys Church and the Tytherington Ridge behind.



View north west from Almondsbury viewpoint over the low-lying landscape extending towards the Severn Estuary and South Wales.



Existing Band C solar farm at Tower Hill Farm in LCA G18.

## Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Score	
		Solar	Wind
<b>Landform and scale (including sense of openness/enclosure)</b>	<ul style="list-style-type: none"> <li>An area of scarps and ridges (particularly broad along Tytherington Ridge) which rise from low-lying levels in the west and the vale and plain to the east.</li> <li>A relatively large-scale and open landscape, with localised areas of enclosure provided by topographical variation, unclipped hedgerows and woodland.</li> <li>Human scale features include trees, hedgerows, narrow lanes and traditional farmsteads.</li> </ul>	M-H	M-H
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>A predominantly pastoral landscape of regular and irregular medium sized fields with some larger arable fields on gentler slopes.</li> <li>A mix of thick, clipped and overgrown hedges divide fields, sometimes augmented by fencing and occasionally stone walls near settlements.</li> <li>Large areas of deciduous woodland dispersed throughout, much of which is ancient.</li> <li>Areas of calcareous, neutral or marsh grassland are scattered across the LCT.</li> <li>Two quarries are designated as SSSIs for their geological significance.</li> <li>Several small commons are located across the north and east.</li> <li>Small traditional orchards are commonly associated with farms with a large commercial orchard near Almondsbury.</li> <li>Settlement comprises the market town of Thornbury, with historic villages, hamlets and scattered farms, often built of local stone.</li> </ul>	M	M
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>The HLC indicates that most fields are of late medieval origin, with significant areas of post-medieval fields created from enclosure of medieval parkland.</li> <li>Ornamental landscapes are associated with historic parkland at Old Down.</li> <li>The settlements of Thornbury, Lower Almondsbury, Olveston, Tytherington and Tockington include conservation areas with concentrations of listed buildings.</li> <li>Nationally designated prehistoric features include a fortified enclosure at Elberton, and hill forts above Rockhampton and south of Thornbury.</li> <li>Small historic landscape parks occur along the ridge south of Almondsbury (Hill Court, Over Court, Hollywood Tower and Berwick Lodge)</li> <li>Thornbury Castle is a grade II Registered Park and Garden containing several grade I listed buildings.</li> </ul>	M	M
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>There are expansive views west over the levels to the Severn Estuary, where the Severn Bridges provide landmarks within the wider estuary landscape.</li> <li>Views east from the edge of the LCT extend over the vale toward the Cotswold Scarp, while to the south the urban edge of Bristol is prominent in local views.</li> <li>The wooded scarp slopes form visually prominent features in the landscape and are noted as Visually Important Hillside<sup>1</sup>.</li> <li>The churches of Rockhampton, Thornbury, Oldbury-on-Severn, Elberton, Olveston and Almondsbury form local landmarks.</li> <li>Pylons and overhead powerlines mark the skyline, particularly concentrated in the north of the LCT. Motorways are prominent within wider views.</li> <li>Wind turbines, power stations and warehouses at Severnside Works and Avonmouth are visually intrusive in views west from the slopes of LCA 18.</li> </ul>	M	M
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>The extensive road network of the M4, M5, M4/M5 interchange and A38 are defining features and introduce noise and visual disruption to the area.</li> <li>Away from major transport corridors, the LCT has a traditional rural character with historic settlements, stone-built farmsteads and semi-natural woodlands.</li> <li>Garden centres, golf courses and 'horsiculture' near Almondsbury and Thornbury introduce a localised suburban character.</li> <li>The urban edge of Bristol/Patchway and Cribbs Causeway remains well contained by the M5, limiting its urban influence on the area.</li> <li>Numerous public rights of way cross the area, including the Jubilee Way and Community Forest Path. National cycle network route 41 skirts the western edge of the LCT.</li> </ul>	L-M	L-M

<sup>1</sup> South Gloucestershire Local Plan Core Strategy 2006-2027 Figure 1 Strategic Green Infrastructure Network



## Overall Assessment of Landscape Sensitivity: Solar PV developments

### Current development

There are two operational solar farms within the LCT; Oakham Farm (approx. 8ha, Band A) and Tower Hill Farm (approx. 16ha, Band C).

### Summary of overall landscape sensitivity

Localised areas of enclosure due to undulations in the topography and existing vegetation, and the influence of adjacent urban areas, suburban land uses, and major transport infrastructure could indicate a lower sensitivity to solar PV development. However, the distinctive scarp slopes and ridgeline which are visually prominent from the surrounding areas, the open character, human scale features (including trees, hedgerows, narrow lanes, and traditional farmsteads), pastoral land uses, areas of semi-natural grasslands, open commons and woodlands (many of which are ancient), historic settlements with listed stone buildings, medieval field pattern and the rural character of the landscape away from the major road network, all increase sensitivity to solar PV developments.

There may be opportunities for small (Band A or Band B) solar developments adjacent to the M5 motorway where hedgerows provide enclosure.

### Any variations in landscape sensitivity at the LCA level:

LCA G17 would be less sensitive to solar PV developments due to the plateau landform (which has limited intervisibility with adjacent landscapes), the presence of existing development (including the M5 motorway), and more extensive suburban land uses.

#### Landscape sensitivity to solar PV development in LCA G17

BAND A (≤5ha)	L				
BAND B (6-10ha)		L-M			
BAND C (11-15ha)			M		
BAND D (16-30ha)				M-H	
BAND E (31-60ha)					H

#### Landscape sensitivity to solar PV development in LCA G18

BAND A (≤5ha)		L-M			
BAND B (6-10ha)		L-M			
BAND C (11-15ha)			M		
BAND D (16-30ha)				M-H	
BAND E (31-60ha)					H

**Overall Assessment of Landscape Sensitivity: Wind Energy developments**

**Current development**

There are currently no wind energy developments in the LCT.

**Summary of overall landscape sensitivity:**

The influence of adjacent urban areas, presence of existing development (particularly major transport infrastructure), and presence of pylons could indicate lower sensitivity to wind energy development. However, the distinctive ridge landform which is visually prominent from surrounding areas, important areas of semi-natural habitat including grasslands and woodlands, presence of human scale features (including distinctive churches) long, open views and the rural character (away from the major road network) increase sensitivity to wind energy developments.

**Any variations in landscape sensitivity at the LCA level:**

LCA G17 would be slightly less sensitive to larger (Band D) wind energy developments due to the smooth profile of the ridgeline landform (compared to the more prominent adjacent scarp slope in LCA G18), the presence of existing development (including electricity pylons and the M5 motorway), and more extensive suburban land uses.

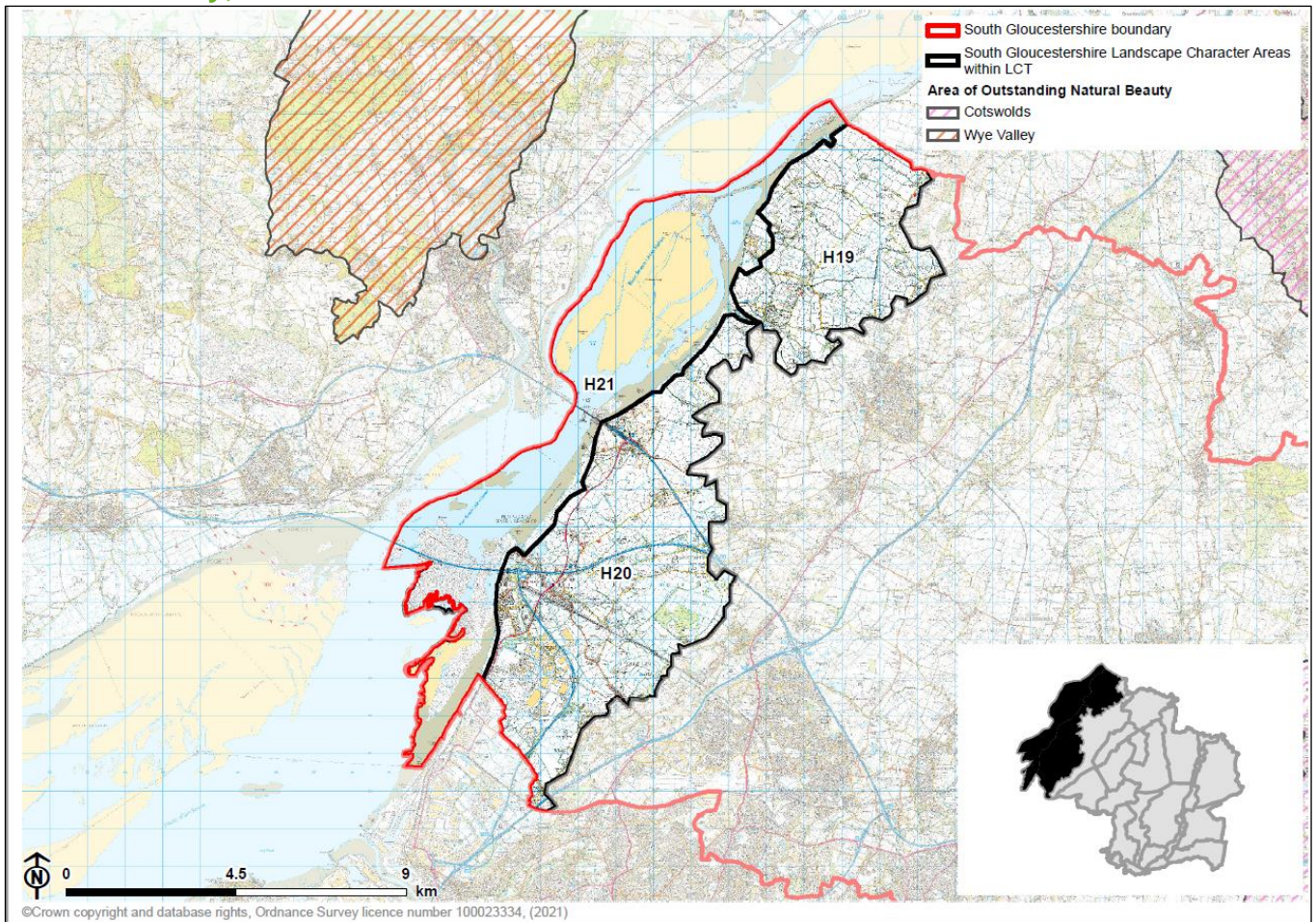
**Landscape sensitivity to wind energy development in LCT G17**

<b>BAND A (18-25m)</b>		<b>L-M</b>			
<b>BAND B (26-60m)</b>			<b>M</b>		
<b>BAND C (61-100m)</b>				<b>M-H</b>	
<b>BAND D (101-120m)</b>				<b>M-H</b>	
<b>BAND E (121-150m)</b>					<b>H</b>

**Landscape sensitivity to wind energy development in LCT G18**

<b>BAND A (18-25m)</b>		<b>L-M</b>			
<b>BAND B (26-60m)</b>			<b>M</b>		
<b>BAND C (61-100m)</b>				<b>M-H</b>	
<b>BAND D (101-120m)</b>					<b>H</b>
<b>BAND E (121-150m)</b>					<b>H</b>

## LCT H: Estuary, shoreline and levels



View west from LCA 20 towards industrial works and turbines at Severnside Works.



Small grazing pasture enclosed by hedgerows and a drainage ditch near Rockhampton (LCA 19).



View south-west across mudflats and saltmarsh to the Severn Estuary, Severn Bridge and to Wales beyond.



Flat pasture fields bound by hedgerows and crossed by pylon routes in LCA 20.

## Assessment of landscape sensitivity to renewable energy development

This LCT comprises the offshore waters of the Severn Estuary, as well as the inland landscape. The assessment below considers only the onshore areas of the LCT (LCAs 19 and 20) which may be suitable for renewable energy development.

Landscape sensitivity assessment			
Criteria	Description	Sensitivity Scores	
		Solar	Wind
<b>Landform and scale (including sense of openness/enclosure)</b>	<ul style="list-style-type: none"> <li>A large-scale, low-lying landscape punctuated by occasional knolls in the north.</li> <li>A simple and largely open landscape, which is highly exposed at the estuary edge with expansive views across the salt marsh, wetland, mudflats and water.</li> <li>Inland, localised enclosure is formed by mature trees, hedgerows, and copses.</li> <li>Human scale features include trees, hedgerows and stone-built farmhouses.</li> </ul>	M	M
<b>Landcover (including field and settlement patterns)</b>	<ul style="list-style-type: none"> <li>Land cover is mainly pastoral, in small-medium, regular and irregular fields.</li> <li>Field patterns are defined by a dense network of angular rhines, often with closely clipped or overgrown hedges, occasionally containing mature trees.</li> <li>Tree coverage is sparse, with small scattered deciduous woodlands and copses, occasional hedgerow or pollarded trees and some remnant overgrown withy beds.</li> <li>Scattered small traditional orchards are associated with farms.</li> <li>Coastal and floodplain grazing marsh make up a large proportion of the area.</li> <li>Tracts of mudflats and coastal saltmarsh habitat line the shores of the Severn Estuary.</li> <li>Aust Cliff folded bed rock and fossil bed forms a prominent landform and geological feature and is designated as a SSSI.</li> <li>Settlement is dispersed comprising small villages/hamlets and farmsteads linked by enclosed lanes, often following the angular drainage pattern.</li> <li>There is significant industrial development along the estuary edge in the south.</li> <li>Numerous motorways and major roads and a railway line bisect LCA 20.</li> </ul>	M-H	M-H
<b>Historic landscape character</b>	<ul style="list-style-type: none"> <li>The HLC indicates field boundaries are of late medieval or parliamentary enclosure, with some medieval/post-medieval enclosure of the coastal clay belt.</li> <li>Some remnant ridge and furrow is evident, particularly in the north.</li> <li>Designated heritage assets include Oldbury Camp Iron age hillfort, which sits on a slight rise above the surrounding levels and the moated Olveston Court.</li> <li>Scattered listed buildings include traditional farmhouses or village churches.</li> </ul>	M	M
<b>Visual character (including skylines)</b>	<ul style="list-style-type: none"> <li>The low-lying and open landform affords expansive views east towards the Severn Ridge and west across the expansive waters of the Severn estuary to Wales.</li> <li>Landmark features on the Severn Ridge contribute to the character of the levels.</li> <li>The two Severn Bridges form distinctive landmark feature in many views.</li> <li>The church at Oldbury-on-Severn, located on a prominent elevated knoll, forms a local landmark rising above the surrounding low-lying landscape.</li> <li>Skylines across the north of the LCT are relatively undeveloped.</li> <li>Industrial development, power generation, chemical works, distribution warehouses and overhead powerlines protrude from the low-lying landscape and can be visually intrusive in the south.</li> </ul>	M-H	M-H
<b>Perceptual and scenic qualities</b>	<ul style="list-style-type: none"> <li>A largely flat and open agricultural landscape divided by a historic rhine drainage pattern.</li> <li>A strong sense of remoteness and experience of dark skies in the north where development is small scale (except for Oldbury Power Station and power lines).</li> <li>Busy linear transport routes and the strong industrial character to the south dilute tranquillity and perceptions of remoteness.</li> <li>The tidal Severn estuary is a dominant feature and strongly influences the character of the LCT.</li> <li>Numerous public rights of way cross the area, including the Jubilee Way and Severn Way recreational routes. National cycle network route 41 runs in a north-easterly direction through the LCT.</li> </ul>	M	M

**Overall Assessment of Landscape Sensitivity: Solar PV developments**

**Existing development**

There is a 7ha (Band B) solar farm immediately to the east of Severn Beach.

**Summary of overall landscape sensitivity**

The simple low-lying landform, localised areas of enclosure and extensive large-scale industrial development could indicate a lower sensitivity to solar PV development. However the open and exposed estuary landscape, proximity to important estuarine habitats (with numerous national and international designations), medieval field patterns bound by a historic drainage pattern, intervisibility with surrounding landscapes, rural and sparsely settled character, and high levels of tranquillity heighten levels of sensitivity to solar PV developments.

There may be opportunities for solar PV developments to be located around existing industrial development south of Severn Beach or along the M5 corridor, where appropriately screened by hedgerow boundaries.

**Any variations in landscape sensitivity at the LCA level:**

LCA H20 would be less sensitive to solar PV developments due to the larger field pattern, enclosure provided by intact hedgerows and presence of existing development and associated transport corridors at Severnside Works and Western Approach Distribution Park.

**Landscape sensitivity to solar PV development in LCA H19**

<b>BAND A (≤5ha)</b>		<b>L-M</b>			
<b>BAND B (6-10ha)</b>			<b>M</b>		
<b>BAND C (11-15ha)</b>				<b>M-H</b>	
<b>BAND D (16-30ha)</b>					<b>H</b>
<b>BAND E (31-60ha)</b>					<b>H</b>

**Landscape sensitivity to solar PV development in LCA H20**

<b>BAND A (≤5ha)</b>	<b>L</b>				
<b>BAND B (6-10ha)</b>		<b>L-M</b>			
<b>BAND C (11-15ha)</b>		<b>L-M</b>			
<b>BAND D (16-30ha)</b>			<b>M</b>		
<b>BAND E (31-60ha)</b>				<b>M-H</b>	

**Overall Assessment of Landscape Sensitivity: Wind Energy Developments**

**Existing development**

There are no existing wind energy developments in this LCT.

**Summary of overall landscape sensitivity:**

The relatively simple low-lying landform and presence of large-scale man-made features including major roads and warehouses could indicate a lower sensitivity to wind energy development.

However, the open and exposed estuary landscape, extensive estuarine habitats (with numerous national and international designations), presence of human scale features (including hedgerow trees, hamlets and scattered farmsteads), historic features (including medieval field patterns and the historic drainage pattern), relative tranquillity, wide visibility from the Wye Valley AONB to the west and Severn Ridge to the east, heighten levels of sensitivity to wind turbine development.

There may be opportunities for wind energy developments in the south-west of LCA H20, adjacent to existing industrial estates and Severnside Works.

**Any variations in landscape sensitivity at the LCA level:**

LCA H19 would have greater sensitivity to wind energy development due to its strong rural and sparsely settled character, intact medieval field patterns, undeveloped skylines and higher levels of tranquillity.

LCA H20 may have lower sensitivity to wind energy developments due to the presence of existing development, including warehouses and industrial units along the estuary in the south west, and major road infrastructure including the M5 / M49 / M48 and their junctions. It's visual relationship with existing industrial development along the coastline also reduces sensitivity.

**Landscape sensitivity to wind energy development in LCA H19**

<b>BAND A</b> (18-25m)		<b>L-M</b>			
<b>BAND B</b> (26-60m)			<b>M</b>		
<b>BAND C</b> (61-100m)				<b>M-H</b>	
<b>BAND D</b> (101-120m)					<b>H</b>
<b>BAND E</b> (121-150m)					<b>H</b>

**Landscape sensitivity to wind energy development in LCA H20**

<b>BAND A</b> (18-25m)	<b>L</b>				
<b>BAND B</b> (26-60m)		<b>L-M</b>			
<b>BAND C</b> (61-100m)			<b>M</b>		
<b>BAND D</b> (101-120m)				<b>M-H</b>	
<b>BAND E</b> (121-150m)				<b>M-H</b>	