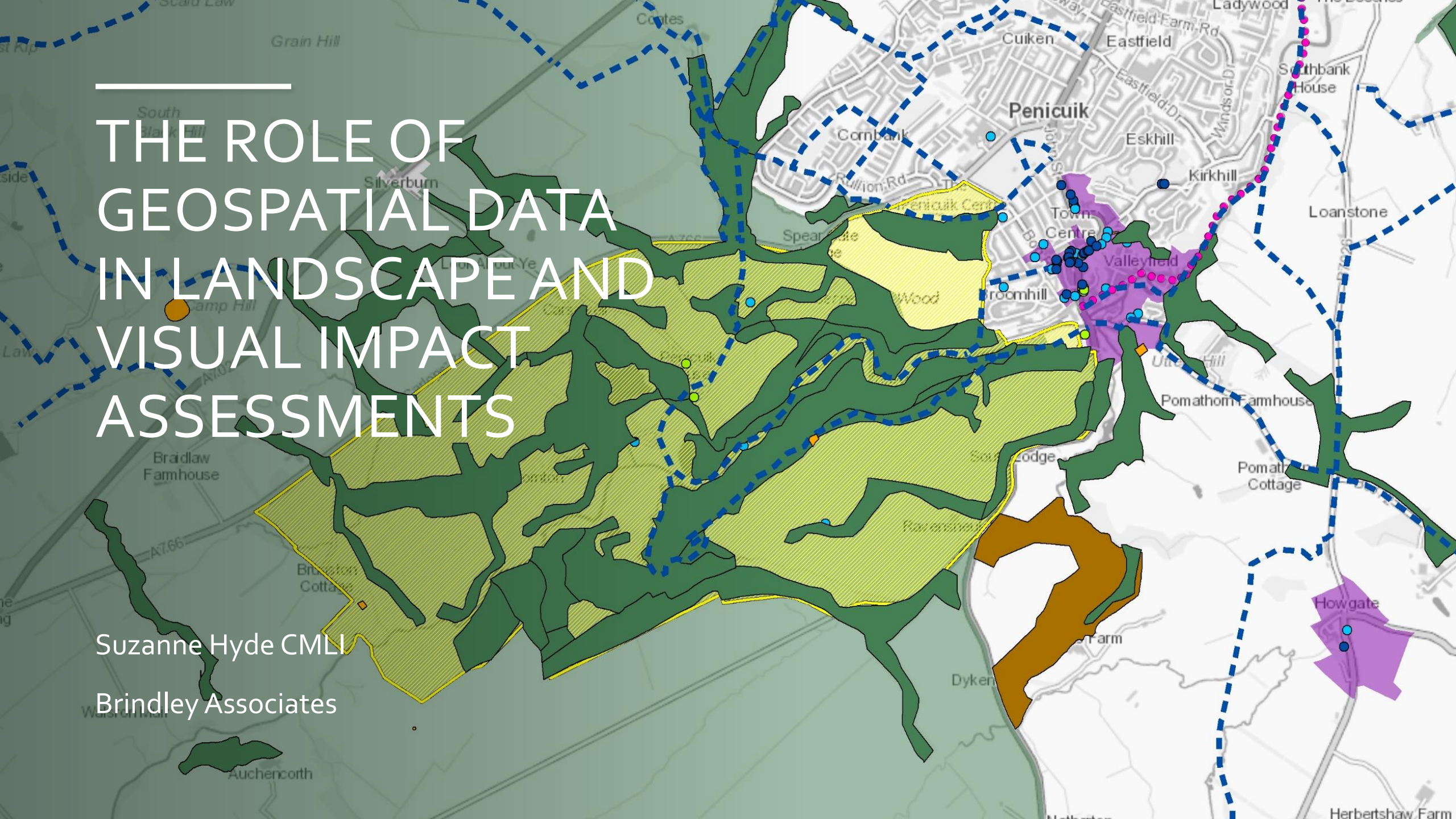


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# THE ROLE OF GEOSPATIAL DATA IN LANDSCAPE AND VISUAL IMPACT ASSESSMENTS

Suzanne Hyde CMLI

Brindley Associates





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# WHAT IS LANDSCAPE AND VISUAL IMPACT ASSESSMENT (LVIA)?

## Purpose

A process to identify and mitigate the effects of a proposed development on landscape character and people's views.

## What it considers

**Landscape effects** – changes to physical features, character and quality of the landscape

**Visual effects** – changes to views and visual amenity experienced by people



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# THE IMPORTANCE OF LVIA

## Why it matters

Supports planning decisions by ensuring development is appropriate and visually acceptable.

Informs design decisions to help ensure proposals maximise the land's potential.

Landscape and visual often considered biggest consenting risk, followed by cultural heritage.



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# LVIA PROCESS – KEY STAGES



Baseline desktop assessment



Site visit and viewpoint photography



Digital modelling and verified photomontage production



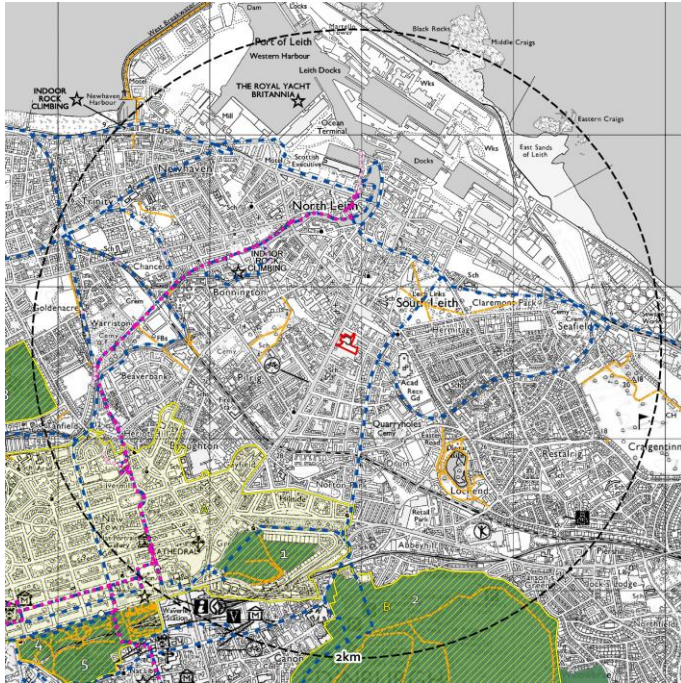
Design iteration and landscape mitigation proposals



Assessment reporting

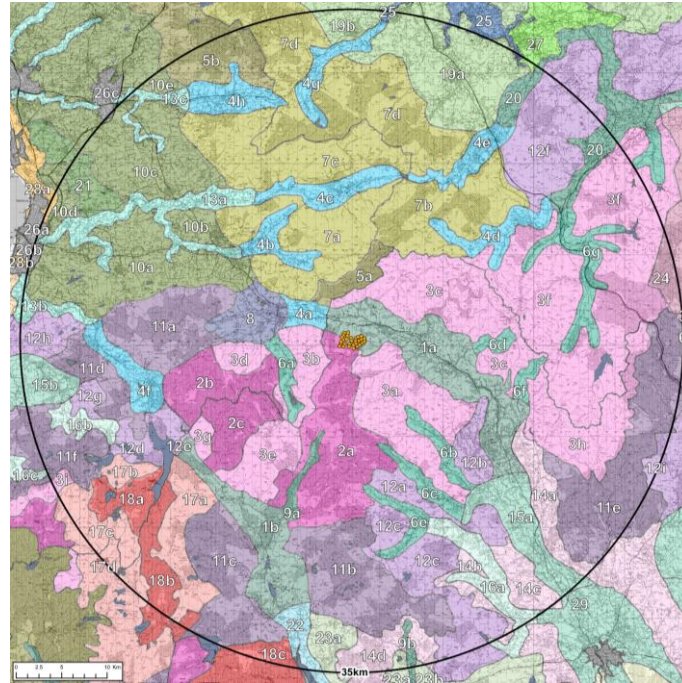
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# BASELINE ASSESSMENT SPATIAL DATA



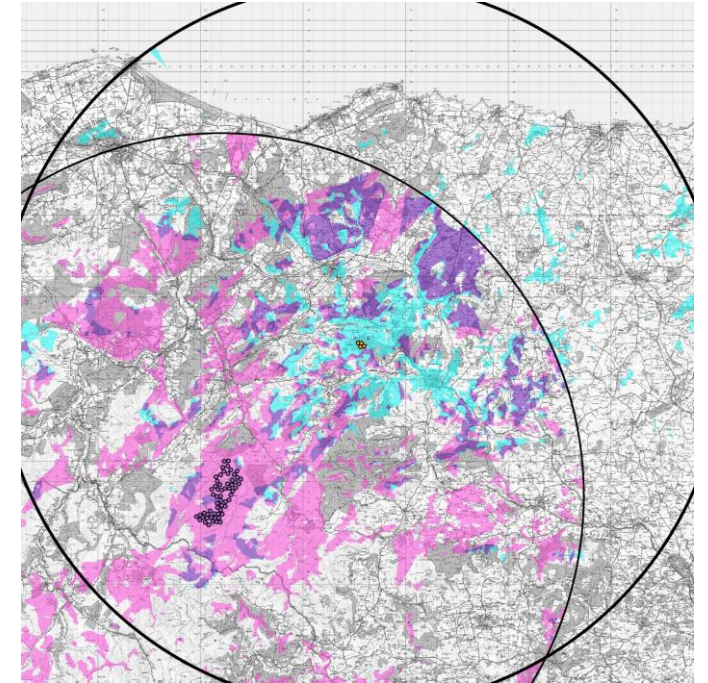
## Designations Mapping

Landscape designations, Cultural Heritage designations, Recreational Routes



## Landscape Character Types

Sourced from NatureScot, Local Authority or custom-made where required



## Zone of Theoretical Visibility

Usually both 'bare ground' and 'with screening' calculations are produced

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# TYPES OF SPATIAL DATA USED IN LVIA



## Ordnance Survey Data

Mapping data of existing features (e.g. roads, woodland buildings, terrain data). Used for base mapping, identifying broad patterns, ZTV calculations.



## Designations Data

Areas of land / features which have been identified for protection due to their value. Often supported by reports or other further information.



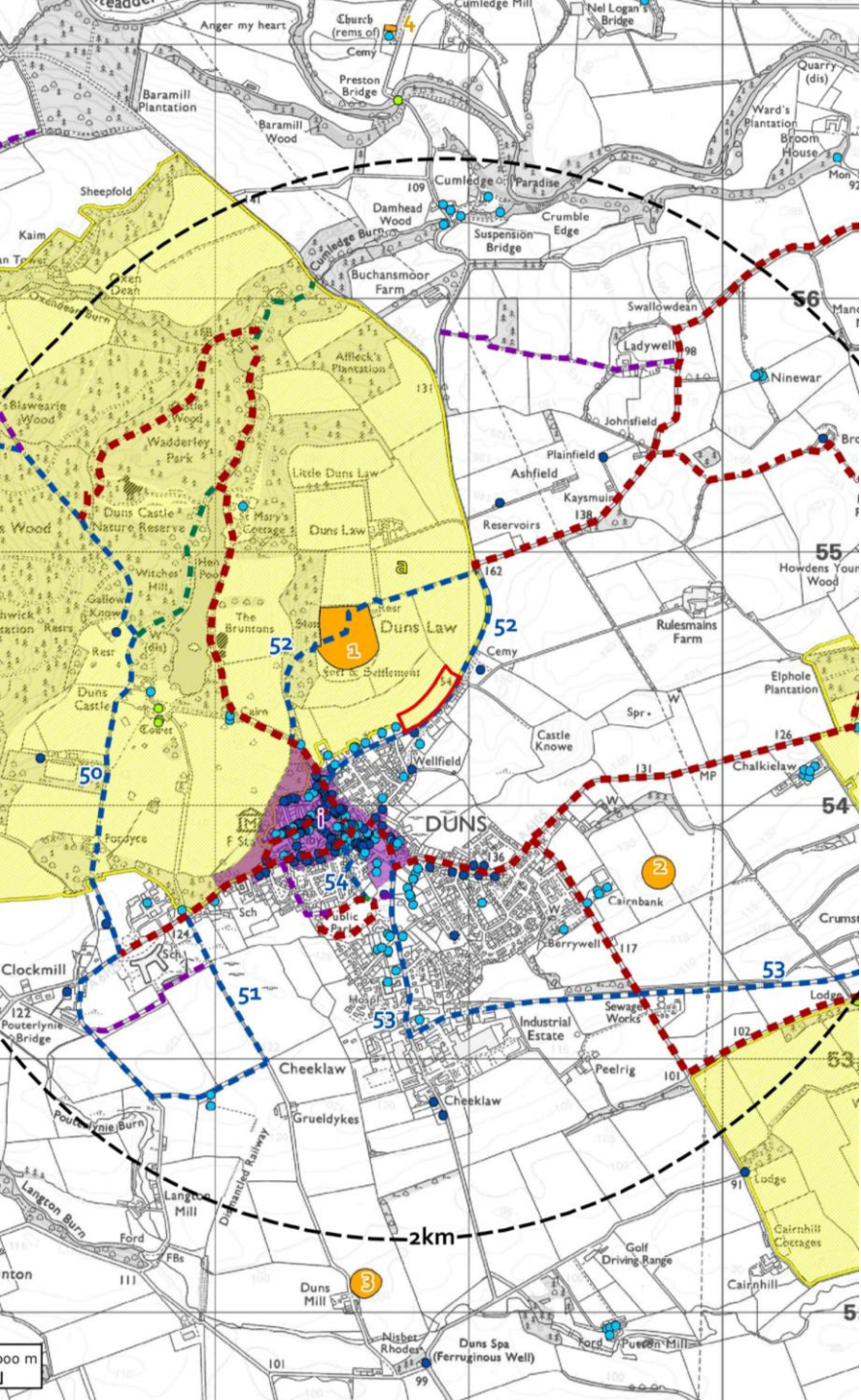
## Planning / Policy Data

Areas of land / features which the local authority or Scottish Government have identified for a particular use or to be subject to a set of rules. (E.g. Housing Land Allocation or Green Belt.)



## Other

Datasets containing more detailed information on a particular aspect of the landscape (e.g. landscape character or habitat networks).



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# DESIGNATION TYPES

## Landscape

National Scenic Areas - Local Landscape Areas - Wild Land

## Cultural Heritage

Gardens and Designed Landscapes - Conservation Areas  
- Scheduled Monuments - Listed Buildings - Battlefields -  
World Heritage Sites

## Ecological

Sites of Special Scientific Interest - Ancient Woodland  
- Special Areas of Conservation - Local Nature Reserves

## Routes

National Cycle Network, walking routes, Core Paths

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# WHY DESIGNATIONS MATTER TO LANDSCAPE ARCHITECTS



All designation types exist to ensure the landscape or habitats it contains is retained, protected and managed appropriately.



Can be relevant even if your site is at a distance from the designation.



Background documents can often provide useful information for the design proposals and assessment.



Attention needs to be paid to them to gain planning consent.



A useful tool for talking clients out of bad ideas!

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# NATIONAL SCENIC AREAS

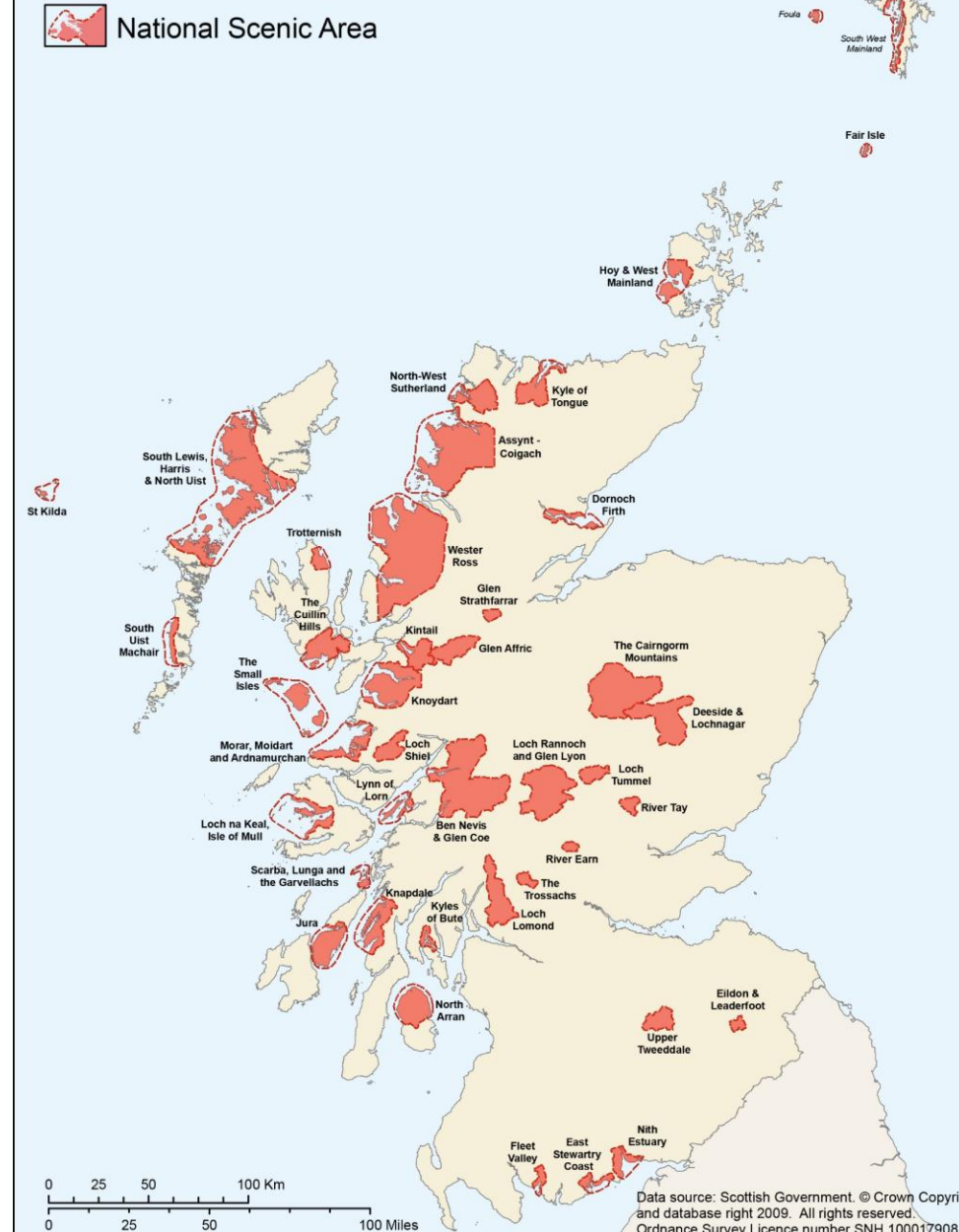
Sources: Scottish Government, NatureScot

- An area “of outstanding scenic value in a national context”.
- The designation’s purpose is both to identify our finest scenery and to ensure its protection from inappropriate development.
- NatureScot have a report which details each National Scenic Area and its special qualities.

## NATIONAL SCENIC AREAS IN SCOTLAND



National Scenic Area

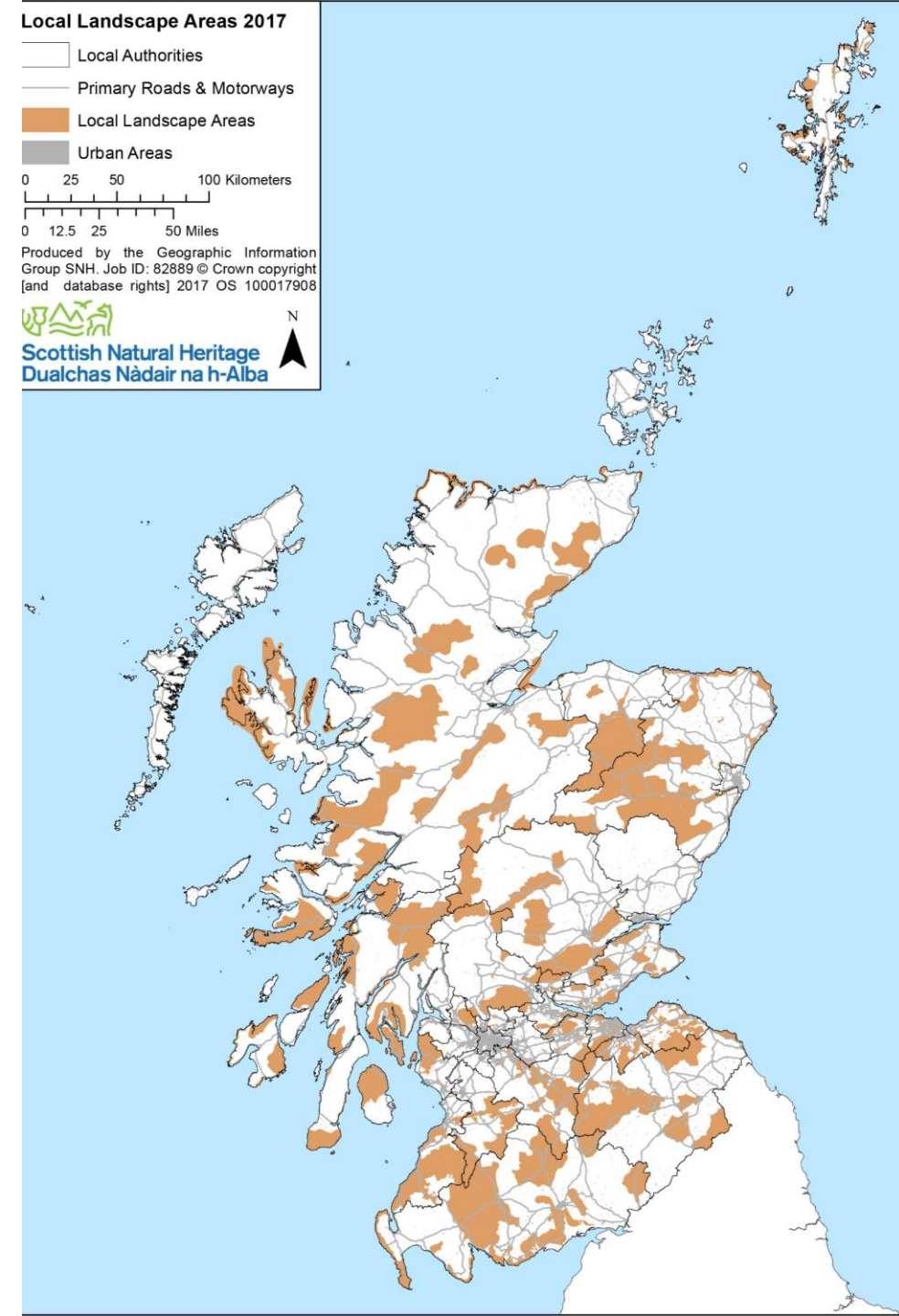


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# LOCAL LANDSCAPE AREAS

## Source: Local authorities

- An area where scenic value is high, at a local level.
- As with National Scenic Areas, this designation's purpose is to ensure its protection from inappropriate development.
- Additional information varies by local authority. Many have Statements of Importance which outline the special character and opportunities for change.

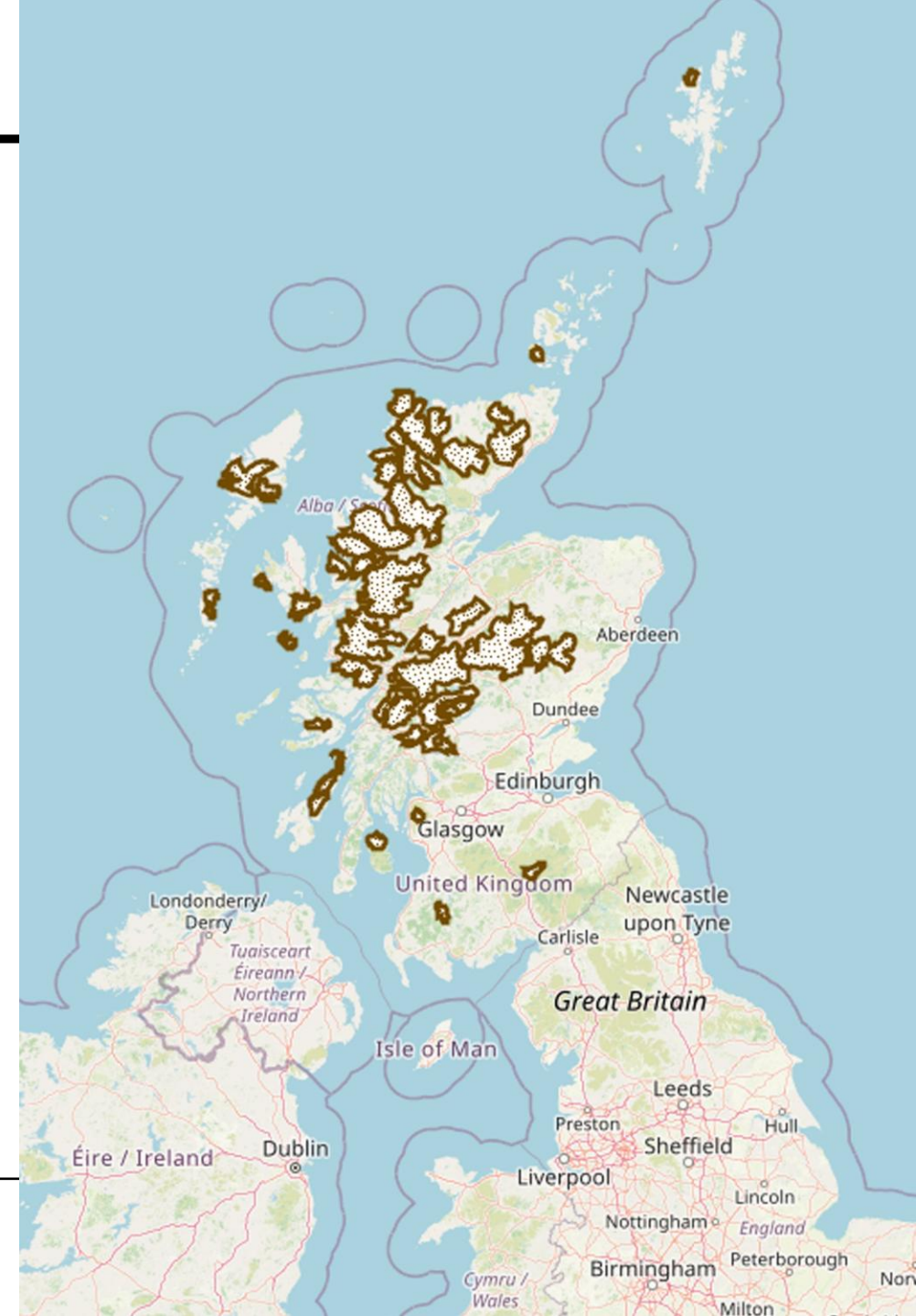


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# WILD LAND

## Source: NatureScot

- Large areas of Scotland – chiefly in the north and west – have largely semi-natural landscapes that show minimal signs of human influence.
- Scottish Planning Policy requires that any development proposal on wild land must “demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation”.





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# LIMITATIONS OF LANDSCAPE DESIGNATION SPATIAL DATA

Often treated as a 'hard boundary' when landscapes are transitional.

Can be considered somewhat subjective.

Local Landscape Areas are defined within Local Development Plans – which can lead to conflicting spatial data when a new LDP is soon to be adopted.

Non-designated landscapes with scenic value have the potential to be dismissed.

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# CULTURAL HERITAGE DESIGNATIONS



World Heritage Sites



Gardens and Designed Landscapes



Conservation Areas



Scheduled Monuments



Listed Buildings



Battlefields



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# LVIA ASSESSMENT OF CULTURAL HERITAGE DESIGNATIONS

Many aspects of the impacts on cultural heritage designations should be assessed by a cultural heritage consultant rather than a landscape architect.

Cultural heritage designations are typically assessed in LVIA due to:

- Value as a recreational resource
- Contribution to landscape character
- Contribution to landscape value



# DESIGNATED ROUTES

- National Cycle Network
  - <https://www.sustrans.org.uk/national-cycle-network>
- Scotland's Great Trails
  - Scotland's Great Trails are managed trails that are clearly waymarked, run largely off-road
- Long Distance Routes
  - Similar to Scotland's Great Trails, but not shown opposite (can be found on OS base mapping)
- Core Paths
  - Key local paths, defined by local authority



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# PRESTON ROAD, DUNS

- Development proposed: housing
- Site: arable farmland
- Designations: within Duns Castle Garden and Designed Landscape

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# KEY VIEWPOINT: DUNS LAW



Photograph

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# KEY VIEWPOINT: DUNS LAW



Photomontage

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# KEY VIEWPOINT: SETTLEMENT EDGE



Photograph

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# KEY VIEWPOINT: SETTLEMENT EDGE



Photomontage

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# LANDSCAPE MITIGATION STRATEGY

- Structure tree planting to the north, to screen views from Duns Law and provide a back drop for views from the south.
  - Structure tree planting to the north-east to screen views from the A6112.
  - Tree and hedge planting along the road side to filter views from the road.
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# ALDI, NECESSITY BRAE

- Proposed Aldi store at the edge of the grounds of a listed building.
  - Aim was to ensure the new store wouldn't harm the setting of the listed building.
  - We produced visualisations to help both the Landscape Architect's design, the Architect's design and the Cultural Heritage Assessment.
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# KEY VIEWPOINT: REAR OF BUILDING



Baseline Photograph

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# KEY VIEWPOINT: REAR OF BUILDING



Photomontage – Original Design

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# KEY VIEWPOINT: REAR OF BUILDING



Photomontage – Final Design

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