# 13. Landscape

# 13.1. Introduction

- 13.1.1. This chapter presents the DMRB Stage 3 assessment of impact of the Proposed Scheme on the landscape in terms of its impact on the landscape character and associated landscape and landscape-related designations.
- 13.1.2. The chapter outlines the existing landscape character within the identified study area of the Proposed Scheme. The assessment of landscape receptors concerns anticipated changes to the landscape and to the landscape character. Landscape character is the distinct pattern of elements and features which together make up the pattern or sense of place. Landscape Character Assessment (LCA) aims to identify and explain this pattern of distinctiveness, resulting in a record of the contributing generic Landscape Character Types (LCT) and area-specific Landscape Character Areas (LCA).
- 13.1.3. Designated landscapes are areas of landscape identified as being of importance at international, national or local levels as defined by statute or in policy documents.
- 13.1.4. Potential impacts are identified and detailed mitigation measures described for the Proposed Scheme between Dalraddy and Slochd. The Proposed Scheme is illustrated in Figure 13.1 and Figure 5.2.

### **Study Area**

- 13.1.5. The study area extends to a 5km buffer either side of the Proposed Scheme, as indicated in Figure 13.1. This reflects the scale of the landscape in the context of the wider landscape character and the associated landscape/landscape-related designations. While some impacts may occur beyond 5km, fieldwork which was undertaken at DMRB Stage 2 indicated that impacts are unlikely to be significant at such distance and, if occurring, would be more likely to be significant within 2km.
- 13.1.6. The Zone of Theoretical Visibility (ZTV) was generated for the A9 mainline and separately for each junction. The ZTV was based on a bare earth digital terrain model (DTM) and did not consider existing land cover such as buildings and vegetation which provide screening, which were later proof-checked in field survey work. The ZTV extent was used as an indicator of the extent of views to the A9 from LCAs and landscape/landscape related designations within the study area.

# 13.2. Approach and Methods

- 13.2.1. The assessment approach was informed with guidance from the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 5<sup>i</sup>; Interim Advice Note (IAN) 135/10<sup>ii</sup>, and the Guidelines for Landscape and Visual Impact Assessment 3<sup>rd</sup> edition (GLVIA3)<sup>iii</sup>.
- 13.2.2. Given the sensitivity of the landscape and the iconic status of the A9 route, a methodology was developed through the A9 Landscape Forum, with involvement of the consultation bodies.
- 13.2.3. For the purpose of the assessment, the operational impacts have considered the scheme in the winter period of the Year of Opening (Year 1) when it is assumed that mitigation planting will provide little or no effective screening and is unlikely to represent

a material contribution to the broader landscape framework. The winter of year 1, therefore, represents a residual impact because this stage includes embedded mitigation. In the summer of the Design Year (Year 15) when mitigation is anticipated to have established and be effective, operational impacts are considered to be residual. The comparison between the winter of year 1 and summer of year 15 can be found in the summary of residual impact at the end of this chapter.

- 13.2.4. Embedded mitigation during operation includes achieving best landscape fit through:
  - Avoiding sensitive landscapes, designations, woodland and landscape features where possible;
  - Varying the embankment slope gradient and profile;
  - Designing irregular rock faces to achieve a 'naturalistic' formation;
  - Considerate location of SuDS features;
  - Structures have been designed having taken regard of specialist aesthetic advice through the A9 Landscape Design Forum including requirements, in key locations, for finishes that reduce the impact on the landscape resource; and
  - Lighting columns are limited to Granish Junction. Height of lighting columns (6-7m) will not be apparent above the existing tree line and luminaires selected to prevent upward glare and utilise G4 glare glass. The NMU/maintenance underpasses at Slochd will have a form of lighting but this will be restricted to the underpasses and is not anticipated to have an adverse impact on the experience of 'dark skies' as a special quality within the Cairngorm National Park.
- 13.2.5. In line with the advice provided within Transport Scotland's Fitting Landscape: Securing More Sustainable Landscapes<sup>iv</sup> and in order to achieve a best fit with the landscape, slope profiles have been steepened or slackened in several locations and the varying slope profiles have been incorporated into the Proposed Scheme design as specific embedded mitigation, refer to Appendix 13.1: Slope Profiling, Appendix 13.5: Landscape Character Assessment Impacts and Figure 13.4:Landscape and Ecological Mitigation. The aim is to slacken slope profiles where this will achieve a more integrated landform, or steepen slopes where the safeguarding of existing landscape cover is desirable. These have included the following locations:
  - Chainage 5500-7000 northbound (Craigellachie NNR) gradient steepened to 1:2-1.25 to minimise impact on woodland;
  - Chainage 5650-5675 southbound (Macdonald Hotel): provision for a bund to provide screening to visual receptors;
  - Chainage 5675-5875 southbound (Macdonald Hotel): provision of slight cutting to square off the landform and provide screening to visual receptors;
  - Chainage 10650-11000 southbound (Laggantygown) gradient slackened to 1:4 to achieve best landscape fit; and
  - Chainage 22300-23650 (Slochd) the cutting slope has been steepened to 1:1 to reduce soil nailing extent (1:1 minimises the required surface area for soil nailing); and
  - Chainage 22650-23000 (Slochd) cutting slope eased out to 1:3 for landscape integration, to reduce extent of soil nail heads and, therefore, visual impact.

# **Baseline Data Collection**

13.2.6. Information from the A9 Dualling Programme Strategic Environmental Assessment (SEA) Strategic Landscape Review<sup>v</sup> and Transport Scotland's Fitting Landscapes:

Securing More Sustainable Landscapes, was used to support this assessment. Policies and plans are covered in Chapter 19: Policies and Plans.

- 13.2.7. A desk study was carried out to review previous reports and maps, and to update existing data. The landscape principles and guidance in the following documents were integral to the approach to the methodology:
  - A9 Dualling Programme. Strategic Environmental Assessment (SEA). Environmental Report Addendum. Appendix F Strategic Landscape Review Report;
  - Cairngorms National Park: Landscape Character Assessment<sup>vi</sup>;
  - Inverness District Landscape Character Assessment: Scottish Natural Heritage Review No. 114 (Richards, J.)<sup>vii</sup>;
  - Moray and Nairn Landscape Assessment: Scottish Natural Heritage Review No. 101 (Turnbull Jeffrey Partnership)<sup>viii</sup>;
  - Cairngorms National Park Authority. Cairngorms National Park Partnership Plan ix;
  - Cairngorms National Park Local Development Plan<sup>x</sup>;
  - The Highland Council. Highland-wide Local Development Planxi;
  - Wildness Study in the Cairngorms National Park, (SNH & CNPA)xii;
  - Scottish Natural Heritage. Assessing Impacts on Wild Land Areas Technical Guidance<sup>xiii</sup>;
  - The Special Landscape Qualities of the Cairngorms National Park, Scottish Natural Heritage Commissioned Report No. 375 (SNH and CNPA, 2010)<sup>xiv</sup>;
  - The Special Qualities of the National Scenic Areas, Scottish Natural Heritage Commissioned Report No. 374 (SNH, 2010)<sup>xv</sup>;
  - Cairngorms National Parks Landscape Toolkit on line resource<sup>xvi</sup>;
  - Historic Environment Scotland. Inventory of Gardens and Designed Landscapes online resource [last accessed 07.03.18] – GIS dataset<sup>xvii</sup>;
  - GIS datasets (Ancient Woodland Inventory);
  - Site surveys, undertaken during March and May 2017, and
  - Ordnance Survey (OS) Maps.
- 13.2.8. Updates to site surveys previously undertaken at DMRB Stage 2 were carried out in March and May 2017 to inform an appreciation of the landscape in both winter and summer months. The surveys were taken from accessible public highways and public footpaths and access to private properties was not obtained.
- 13.2.9. The site visits helped to inform the Technical Landscape Review which was undertaken to help inform slope profiles as part of embedded mitigation (see Appendix 13.1: Slope Profiling).
- 13.2.10. The process undertaken to help inform rock cuts is set out in Appendix 13.2: Rock Cuts.
- 13.2.11. Strategic design principles were identified and project specific design objectives were developed based on the information in the SEA: Strategic Landscape Review, site visits and specialist aesthetic advice (Appendix 13.3: Landscape Objectives).
- 13.2.12. The Special Landscape Qualities (SLQ) set out in the report The Special Qualities of the Cairngorms National Park have been considered. The Cairngorm National Park Landscape Toolkit, which provides guidance and descriptions for the special landscape



qualities within the Landscape Character Areas, was used to inform consideration of the potential impact on the SLQs of the CNP (see Appendix 13.4: Special Qualities of the Cairngorms National Park).

- 13.2.13. The SLQs have been considered in terms of whether there is likely to be an impact upon them, but they have not been assigned a level of significance. This is because they are based on the key characteristics of the LCAs, therefore to do so would risk 'double counting' in the assessment. Some of the SLQs include the less tangible aspects of landscape as experienced by people the root perceptual qualities or those that are considered to be more-than representative (in terms of being represented by the Landscape Character Assessments). Again, these have been considered in terms of whether there is likely to be an impact upon them, or not, but they have not been formally assessed due to the potential 'risk' of assessing the response that the intangible aspects of landscape might typically evoke in an individual.
- 13.2.14. Similarly, the Special Qualities (SQs) of the Cairngorms National Scenic Area (CNSA), set out in the report The Special Qualities of the National Scenic Areas have also been considered. Due to the extent of the Cairngorms NSA, the report (SNH and CNPA, 2010) states that the analysis of the results of the Special Qualities (SQ) of the NSA does not differ significantly from the SLQs of the CNP. Therefore, they have not been assessed separately here.

# Consultation

13.2.15. Consultation was undertaken throughout the DMRB Stage 3 process with CNPA, Scottish Natural Heritage (SNH) and The Highland Council (THC) through the A9 Dualling Environmental Steering Group, and the A9 Landscape Forum. This helped to identify and address landscape mitigation measures.

# **Assessment of Impacts**

13.2.16. In accordance with GLVIA3, the assessment has considered the sensitivity of the landscape receptor (based on consideration of value and susceptibility), the magnitude of impact of the Proposed Scheme upon it, and resulted in a determination of significance of impact of the Proposed Scheme on the landscape resource.

#### Value

- 13.2.17. The sensitivity of the landscape resource considers the value of the landscape and its susceptibility regarding the specific change proposed (GLVIA3).
- 13.2.18. GLVIA3 describes value as "the relative value that is attached to different landscapes by society'. Almost the entire Proposed Scheme lies within the Cairngorms National Park. The CNP is a national landscape-related designation, being designated partly for its landscape value. The study area also contains part of the Cairngorm National Scenic Area (CNSA) a landscape designation, and part of Area of Wild Land. Wild land areas have physical attributes (perceived naturalness, a lack of modern human artefacts or structures, little evidence of contemporary land use, landscape which is rugged or physically challenging and remote or inaccessible), and to which there is a perceptual response. Therefore, it is undoubtedly of national landscape value.

#### Table 13.1: Criteria for Assessing Value of Designated Landscapes

Value	Description
International/national	International and/or national landscape/landscape-related designations e.g. World Heritage Sites, National Parks, National Scenic Areas,

Value	Description
	Historic Environment Scotland Inventory of Gardens and Designed Landscapes.
Regional/Local	Regional/Local landscape/landscape-related designations e.g. Regional Scenic Areas, Areas of Great Landscape Value (AGLV), Special Landscape Areas (SLA) or other similar terminology as set out in local policy and guidance documents.
	Regional or Local landscape/landscape related designations which, at the site specific scale are not robust or of a quality reflecting the wider designation, but which may still hold great local amenity value.

13.2.19. A small part of the Proposed Scheme lies outwith the CNP boundary on land that is undesignated. A review of existing non-designated landscapes was undertaken and an overall judgement of high, medium or low was determined using professional judgement, based on the attributes as outlined in GLVIA3 and set out in Table 13.2 below.

Attribute	Description
Landscape Quality	A measure of the physical state of the landscape, its intactness and condition of landscape elements.
Scenic Quality	Landscapes that appeal primarily to the visual senses.
Rarity	The presence or rare elements or features in the landscape or the presence of a rare Landscape Character Type.
Representativeness	Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples.
Conservation or Cultural Interest	The presence of features of wildlife, earth science or archaeological or historical and cultural interest which add to the value of the landscape.
Recreational Value	Evidence the landscape is valued for recreational activity where experience of the landscape is important.
Perceptual Aspects	A landscape valued for its perceptual qualities, notably wildness and/or tranquillity.
Associations	Landscapes associated with artists, writers, or events in history that contribute to perceptions to the natural beauty of the area.

#### Table 13.2: Landscape Attributes for Non-designated Landscapes Criteria

#### Susceptibility

13.2.20. Susceptibility relates to the ability of the landscape to absorb specific changes without undue consequence for the baseline or the strategies, plans and policies relating to the landscape. Susceptibility was assessed in terms of the following criteria, based on professional judgement, as set out in Table 13.3. below:

Susceptibility	Criteria
High	The landscape is unlikely to be able to accommodate the proposed change without undue consequences.
Medium	The landscape is likely to be able to accommodate the proposed change, albeit with some consequences.



Low	The landscape will be able to accommodate the proposed change with little or no consequences.

#### Sensitivity

13.2.21. Value and susceptibility help to inform sensitivity. The criteria used to assess landscape sensitivity are listed in Table 13.4 below:

Table 13.4: Landscape	Sensitivity Criteria
-----------------------	----------------------

Sensitivity	Criteria
High	Landscape or landscape elements of particular distinctive character, highly valued and considered susceptible to relatively small changes. Landscapes which by nature of their character and value would struggle to accommodate change of the type proposed.
Medium	Landscape of moderately valued characteristics considered reasonably tolerant of change. Landscapes which by nature of their character and value would be able to partly accommodate change of the type proposed.
Low	Landscape of generally low valued characteristics considered potentially tolerant of substantial change. Landscapes which by nature of their character and value would be able to accommodate change of the type proposed.

#### Magnitude of Impact

13.2.22. The magnitude of landscape impact was derived from the size or scale, geographical extent, duration and reversibility of the change on the landscape resource. These are presumed to be adverse unless specifically stated as beneficial. These factors helped inform the magnitude of the landscape impact as shown in Table 13.5 below.

Magnitude of Impact	Criteria
High	Noticeable change to a wide area of the landscape or intensive change to a limited area of the landscape.
Medium	Change to a relatively wide area of the landscape or noticeable change to a limited area of the landscape resource
Low	Slight change to the wider area of the landscape or slight/no change to a limited area of the landscape resource.
Negligible/None	No perceptible change to the landscape resource

#### Impact Significance

- 13.2.23. The significance of landscape impact was determined by the sensitivity of the landscape resource in relation to the magnitude of impact upon it resulting from the Proposed Scheme, refer to Table 13.6.
- 13.2.24. The significance of impact has also been determined using professional judgement. This approach relies on a robust and transparent narrative based on the available guidance (DMRB, IAN135/10, GLVIA3).

Table 13.6: Significance of	f Landscape Impact	Criteria
-----------------------------	--------------------	----------

Level of Impact	Criteria
Substantial	Adverse: The Proposed Scheme would be at considerable variance with the character (including quality and/or value) and/or special qualities of the landscape receptor, degrade or diminish the integrity of a range of characteristic features or elements, or damage a sense of place resulting in an adverse impact. Beneficial: The Proposed Scheme would enhance the character (including quality and/or value) and/or special qualities of the landscape receptor, create an iconic high quality feature and/or series of elements or enable a sense of place to be created or enhanced resulting in a beneficial impact.
Moderate	Adverse: The Proposed Scheme would conflict with the character (including quality and value) and/or special qualities of the landscape receptor, have an adverse impact on characteristic features or elements, or diminish a sense of place resulting in an adverse impact. Beneficial: The Proposed Scheme would improve the character (including quality and value) and/or special qualities of the landscape receptor, enable the restoration of characteristic features and elements partially lost or diminished by inappropriate management or development or enable some sense of place resulting in a beneficial impact.
Slight	Adverse: The Proposed Scheme would not quite fit the character (including quality and value) and/or special qualities of the landscape receptor, be at variance with characteristic features and elements, or detract from a sense of place resulting in an adverse impact. Beneficial: The Proposed Scheme would complement the character (including quality and value) and/or special qualities of the landscape, maintain or enhance characteristic features and elements and enable some sense of place to be restored resulting in a beneficial impact.
None	The Proposed Scheme would maintain the character and/or special qualities of the landscape receptor, blend in with characteristic features and elements and enable a sense of place to be retained.

13.2.25. Landscape impact was considered significant where the significance level was evaluated as being moderate or greater and mitigation would generally be considered to be required where possible.

# Limitations of the Assessment

13.2.26. The surveys were taken from accessible public roads and public footpaths and access to private properties was not obtained. Where it was not possible to obtain actual views, assumed views have been used.

# **13.3. Baseline Conditions**

13.3.1. Baseline conditions are the landscape conditions against which any future change can be measured or assessed. The general landscape context is helpful in this regard, and is followed by identification of the landscape designations and landscape character areas.

# Landscape Context

13.3.2. The existing A9 lies within the Strath of the River Spey with the Monadhliath Mountains to the west, the Cairngorms Massif to the east, and the Strathdearn Hills to the north.

The rocky, woodland covered outcrops of Craigellachie and Torr Alvie are particularly prominent within the southern part of the study area.

- 13.3.3. The River Spey runs through the central part of the study area before meandering eastwards. The River Dulnain crosses the study area further north. Tributaries dissect the strath hills and drain into the straths.
- 13.3.4. Woodland is a key landscape element both in the context of policy woodland associated with the designed landscapes to the east of Loch Alvie and the extensive conifer plantations and mixed woodland that align the A9 and are extensive within the wider study area. Particularly in the more southern extent of the study area, there are numerous lochs, lochans and the River Spey. The interplay of farmland, designed landscapes and woodland, the open moorland, water and settlement pattern makes for a rich tapestry of land use.
- 13.3.5. Loch Alvie, with the picturesque Alvie Parish Church, provides a key feature to the south, with Torr Alvie hill providing additional interest. The rocky birch covered outcrop of Craigellachie near Aviemore is a local landmark. The River Spey and River Dulnain are key landscape features. Key built features include the Duke of Gordon's Monument on Torr Alvie, and the Slochd Mhuic Viaduct, with the HML railway being an intermittent element throughout. The Soldier's Head near Slochd a natural feature of the weathered rock face is a key point of local interest. Visual detractors are limited but there are numerous communications masts on elevated ground near Slochd.
- 13.3.6. The main settlements are Aviemore a key tourist destination with a mix of Victorian architecture and mid-century modern additions, and Carrbridge which is located at the crossing of the River Dulnain and retains the traditional vernacular form. Farms, individual residences/clusters of properties can be found scattered along the floor and lower slopes of the straths. The general absence of settlement in the upper moorlands, and in the vicinity of the rocky passes, is noticeable.

# Landscape/ Landscape-Related Designations

13.3.7. The landscape resources considered in the assessment are shown in Figures 13.1 and 13.2: Landscape Designations and Figure 13.3: Landscape Character. Detail on the key characteristics and special qualities of these are set out below.

#### National Scenic Areas (NSA)

- 13.3.8. In terms of landscape designations, the Cairngorm Mountains National Scenic Area (CMNSA) is the only national landscape designation which lies partially within the study area and which has a part of the proposed scheme within its boundary (a small section of the scheme south of Aviemore lies on/just within the boundary of the CMNSA).
- 13.3.9. The CNPA has determined the Special Qualities (SQ) of the National Scenic Areas (NSA) that lie within the Cairngorm National Park (CNP) as part of the Special Landscape Qualities (SLQ) of the CNP.
- 13.3.10. The two NSAs within the Cairngorms National Park are centred on the highest mountain plateaux at the core of the park. However, they cover a significant proportion of the National Park and both include lower hills and areas of moorland, woodland and inhabited strath which characterise much of the Park. It is for this reason that an analysis of the results has shown that a list of the SQs of these NSAs does not differ significantly from the list of SLQs of the Park as a whole. Hence the qualities of each NSA have not been listed separately<sup>xviii</sup>.

- 13.3.11. To avoid the risk of 'double counting', therefore, the Special Landscape Qualities (SLQ) of the CNP as they apply to the NSA have been considered in terms of whether they are likely to be impacted upon within the narrative of the LCA assessment (see Appendix 13.5: Landscape Character Assessment Impact), but not allocated a separate significance rating. The most relevant SLQs include:
  - Magnificent mountains towering over moorland, forest and strath;
  - Landscapes both cultural and natural;
  - The unifying presence of the central mountains; an imposing massif of strong dramatic character;
  - Snowscapes;
  - Broad, farmed straths;
  - Renowned rivers;
  - Beautiful lochs;
  - Parkland and policy woodland; and
  - Dominance of natural landforms.

#### Special Landscape Areas (SLA)

- 13.3.12. Special Landscape Areas (SLA) are a local authority landscape designation. A small part of the Drynachan, Lochindorb and Dava Moors SLA extends to within the northeast boundary of the study area. The Proposed Scheme will not be within the SLA. The SLA contributes to the landscape character, however, the existing A9 has limited impact on the key characteristics of the designation. Key characteristics of this SLA are:
  - High rolling moorland with gentle gradients;
  - Valued heather moorland;
  - Homogenous character;
  - Sense of spaciousness and tranquillity reinforced by wide views and a sparse human presence; and
  - Isolated fragments of native pine-birch woodland emphasise the dominance of the horizontal dimension and generally unbroken skyline.
- 13.3.13. The dualling of the A9 does not impact on the key characteristics of the SLA, therefore the SLA has been considered in terms of its contribution to the landscape character (Appendix 13.5) and the SLQs of the CNP (Appendix 13.4) but not allocated a separate impact rating.

#### National Park

- 13.3.14. In terms of landscape-related designations the CNP is the largest in geographic area.
- 13.3.15. Most of the 5km study area lies within the Cairngorms National Park (CNP). The CNPA has identified LCAs, and additionally, the Special Landscape Qualities (SLQ) of the Park. Therefore, this assessment considers the CNP in the context of the LCAs and SLQs (refer to Appendix 13.5: Landscape Character Assessment Impact and Appendix 13.4: Special Landscape Qualities of The Cairngorm National Park) but these are not allocated a separate significance rating.

#### Gardens and Designed Landscapes (GDL)

- 13.3.16. Gardens and Designed Landscapes (GDL) is a landscape-related designation (there are other criteria which contribute). The Kinrara Garden and Designed Landscape lies to the east of Loch Alvie in the south of the study area (see Figure 13.1).
- 13.3.17. Kinrara GDL is summarised in the Historic Environment Scotland Inventory as 'An outstanding example of late 18<sup>th</sup> century picturesque landscape design which makes a significant contribution to the scenic qualities and nature conservation values in Strathspey'.
- 13.3.18. The Doune of Rothiemurchus Garden and Designed Landscape lies east of the Kinrara Garden and Designed Landscape in the south of the study area (see Figure. 13.1).
- 13.3.19. The Doune of Rothiemurchus GDL is summarised in the Inventory as 'A designed landscape of outstanding historical value that was informalised in the 19<sup>th</sup> century by parkland designed in accordance with picturesque principles'.
- 13.3.20. Gardens and Designed Landscapes contribute to the SLQs of the CNP and NSA and there is some overlap between these and the key characteristics of the LCAs. Therefore, GDLs have been considered within the LCA assessment (Appendix 13.5: Landscape Character Assessment Impact) and for their contribution to the SLQs of the CNP (Appendix 13.4) but are not allocated a separate impact rating.

#### Wild Land

- 13.3.21. Wild Land is not a statutory designation, but has been considered within this assessment as a landscape-related designation. Because the Wild Land areas are mountain ranges, they contribute to the landscape character and the SLQs of the CNP and SQs of the Cairngorm Mountains NSA.
- 13.3.22. A small part of The Monadhliath Wild Land area lies partially within the southwestern part of the study area, although it extends extensively westwards outwith the study area (see Figure 13.1: Landscape Designations). Given that the nearest part of the designation is over 3km from the A9, and the ZTV indicates that the existing A9 is visible only from part of Geal-charn Mor it has not been further assessed.
- 13.3.23. A small part of The Cairngorms Wild Land area lies partially within the south-eastern part of the study area, although it extends across the Cairngorms Massif eastwards outwith the study area (see Figure 13.1). Given that the nearest part of the designation is over 3km from the A9, and the existing A9 is visible only from part of Geal-charn it has not been further assessed.

#### Ancient Woodland

13.3.24. Ancient Woodland is considered a landscape-related designation for the purposes of this assessment. Ancient Woodland distribution is extensive along the valleys and straths within the study area and largely absent from the more elevated mountainous areas as can be seen in Figure 13.2: Landscape Designations. The A9 will have an impact upon this landscape-related designation in localised areas in close proximity to the A9. It is part of the assessment of landscape character (see Appendix 13.5: Landscape Character Assessment Impacts).

# **Regional Landscape Character Types and Areas**

- 13.3.25. Review of the suite of the published regional landscape assessment documents, and the CNP Landscape Character Assessment informed the consideration of the key characteristics of the landscape resource.
- 13.3.26. The CNP Landscape Character Assessment 2009 indicates that the LCAs through which the A9 runs are all lowland areas but are partially overlapped with upland areas along the western side of the A9 as indicated in Figure 13.3: Landscape Character Areas. This reflects the 'transition area' where highland meets lowland within Strathspey. The CNPA have mapped these separately, but for the purposes of this assessment they are included in one single Figure and the transition area has been 'hatched' for clarification.
- 13.3.27. The LCAs through which the A9 runs have been fully assessed in terms of potential impacts upon them and include:
  - Badenoch: Loch Alvie to Inverdruie LCA;
  - Strathspey: Inverdruie to Pityoulish LCA;
  - Strathspey: Pityoulish to Boat of Garten LCA;
  - Strathspey: Dulnain Strath LCA;
  - The Slochd LCA;
  - Southern Uplands LCA; and
  - Southern Uplands LCA: Western Dava Moors LLCA (boundary of).
- 13.3.28. LCAs through which the A9 does not run are included in terms of context (see Fig. 13.3: Landscape Character Areas) but have not been assessed given the limited visibility and the nature of the project – the dualling of an existing road.

Badenoch: Loch Alvie to Inverdruie LCA (CNP Landscape Assessment 2009)

- 13.3.29. The LCA is judged to be of medium sensitivity due to its association with a high value landscape (within CNP, within part of CMNSA, within two GDLs and containing Ancient Woodland). The susceptibility is considered to be medium with the LCA, which is extensive, likely to be able to accommodate the change associated with the Proposed Scheme given the existing infrastructure corridor (A9, railway and B9152) albeit with some consequence.
- 13.3.30. Key characteristics of the LCA include:
  - Steep sided, densely wooded outcrop hills;
  - Irregularly shaped, steep sided hills; and
  - Diverse vegetation cover.
- 13.3.31. Special Landscape Qualities of the CNP most relevant to the LCA include:
  - Broad farmed straths;
  - Renowned rivers (River Spey);
  - Beautiful lochs (Loch Alvie);
  - Dominance of natural landforms (Torr Alvie and Ord Ban);
  - Parkland and policy woodland (Kinrara and Doune of Rothiemurchus); and

• Focal cultural landmarks (Duke of Gordon's Monument).

# Strathspey: Inverdruie to Pityoulish LCA (CNP Landscape Assessment 2009)

- 13.3.32. The LCA is judged to be of low-medium sensitivity. Although being within a high value landscape (within CNP, within part of CMNSA, within Craigellachie National Nature Reserve and containing Ancient Woodland), it is considered that given the existing infrastructure corridor (A9, railway and B9152) and the proximity of the town of Aviemore the LCA, which is extensive, is likely be able to accommodate the change associated with the Proposed Scheme with little or slight consequence so that the susceptibility is considered to be medium.
- 13.3.33. Key characteristics of the LCA include:
  - Steep craggy wooded slopes (Craigellachie);
  - Wide meanders of the River Spey; and
  - The town of Aviemore.
- 13.3.34. Special Landscape Qualities of the CNP most relevant to the LCA include:
  - Broad farmed straths;
  - Renowned rivers (River Spey);
  - Dominance of natural landforms (Craigellachie);
  - Light and airy birch woodlands;
  - Distinctive planned towns (Aviemore); and
  - Vernacular buildings.

# Strathspey: Pityoulish to Boat of Garten LCA (CNP Landscape Assessment 2009)

- 13.3.35. The LCA is judged to be of low sensitivity. Although being within a high value landscape (within CNP and containing Ancient Woodland), it is considered that given the existing infrastructure corridor (A9, railway and A95), topography and the density of woodland cover the LCA, which is extensive, is likely to be able to accommodate the change associated with the Proposed Scheme with little slight consequences upon the LCA and the susceptibility is low.
- 13.3.36. Key characteristics of the LCA include:
  - Undulating terrain;
  - Steep wooded slopes;
  - Lochs & lochans (Avielochan and Loch Vaa); and
  - Conifer woodland fringed with birch.
- 13.3.37. Special Landscape Qualities of the CNP most relevant to the LCA include:
  - Dark and venerable pine forests;
  - Attractive and contrasting textures; and
  - Beautiful lochs (Avielochan and Loch Vaa).



#### Strathspey: Dulnain Strath (CNP Landscape Assessment 2009)

- 13.3.38. The LCA is judged to be of medium sensitivity. Susceptibility is considered to be medium. Although being within a high value landscape (within CNP and containing Ancient Woodland) it is considered that given the existing infrastructure corridor (A9, railway) the LCA, which is extensive, is likely to be able to accommodate the change associated with the Proposed Scheme without undue consequence.
- 13.3.39. Key characteristics of the LCA include:
  - Broad flat floodplain narrowing at A9 crossing;
  - Commercial/managed pine woodlands; and
  - Development (i.e. presence) of Carrbridge.
- 13.3.40. Special Landscape Qualities of the CNP most relevant to the LCA include:
  - Strong juxtaposition of contrasting landscapes (the open strath with more 'enclosed' woodland to north and south);
  - A landscape of layers from inhabited straths to remote uninhabited uplands; and
  - Focal cultural landmarks (Highland Mainline Railway bridge).

#### The Slochd LCA (CNP Landscape Assessment 2009)

- 13.3.41. The LCA is judged to be of medium sensitivity. Susceptibility is considered to be medium. Although being within a high value landscape (within CNP, partly within the Drynachen, Lochindorb and Dava Moors SLA and containing Ancient Woodland), it is considered that given the existing infrastructure corridor (A9, railway, and numerous distractors including telecoms masts and steel tower overhead line and extensive mesh treatment to the existing rock cuts) the landscape is likely to be able to accommodate the change associated with the Proposed Scheme albeit with some consequence upon the LCA.
- 13.3.42. Key characteristics of the LCA include:
  - Deep, steep sided gorge, a dramatic pass (previously widened to accommodate A9);
  - Western hills covered with conifer woodland;
  - Northern hills covered with heather moorland;
  - Regularly shaped 18<sup>th</sup>/19<sup>th</sup> Century fields;
  - Properties tucked below A9 in gorge; and
  - Drama upon entry to the National Park from the north through a narrow pass contrast between enclosure of gorge and exposure of the basin.
- 13.3.43. Special Landscape Qualities of the CNP most relevant to the LCA include:
  - Landscapes both cultural and natural;
  - Dominance of natural landforms;
  - Layers of receding ridgelines; and
  - Dramatic historical routes.

÷

#### Southern Uplands LCA (Inverness District Landscape Assessment 1999):

- 13.3.44. The LCA is judged to be of low-medium sensitivity. Susceptibility is considered to be low-medium. It is considered that given the existing infrastructure corridor (A9, railway, A95) and the nearby landscape detractors (communications masts and steel tower overhead lines) the LCA, which is extensive, is likely to be able to accommodate the change associated with the Proposed Scheme with little or slight consequence upon it.
- 13.3.45. Key characteristics of the LCA include:
  - Large scale, smooth rounded hills;
  - Heather moorland;
  - Occasional rocky outcrops;
  - Sense of remoteness;
  - Coniferous plantations with linear edges; and
  - 'Cuttings and embankments tend to appear particularly visible within this landscape due to the general smoothness of its surface'.
- 13.3.46. As the SLQs have been defined for the CNP, and the Southern Uplands LCA lies outwith the CNP, SLQs are not available for the Southern Uplands LCA.

Western Dava Moor Uplands LLCA (sub-LLCA of the Southern Uplands LCA for the purposes of this assessment):

- 13.3.47. Due to the extent of the Southern Uplands LCA (regional) and the difference in scale of this LCA in relation to the LCAs within the CNP, it was considered beneficial to subdivide the Southern Uplands LCA into sub LLCAs. The LLCA is judged to be of low-medium sensitivity. Susceptibility is judged to be low-medium. It is considered that the existing infrastructure corridor (A9 and railway) and the nearby landscape detractors (communications masts and steel tower overhead lines) the LLCA is likely to be able to accommodate the change associated with the Proposed Scheme with little or slight consequence upon it.
- 13.3.48. Key characteristics of the LLCA include:
  - smooth moorland hills;
  - high moorland characteristics of blanket bog and heather;
  - isolated built features; and
  - intervisibility with the other LCAs including the scale of Strathdearn.
- 13.3.49. As the SLQs have been defined for the CNP, and the Southern Uplands LCA lies outwith the CNP, SLQs are not available for the Southern Uplands LCA.

# **13.4.** Potential Impacts

13.4.1. This section summarises impacts that are likely to occur during the construction of the Proposed Scheme. Landscape mitigation, can be achieved through alignment, earthwork gradient and slope profiling, rock cuts (embedded mitigation) and planting which are integrated into the design and described in Chapter 4 (Design Development) and Chapter 5 (The Proposed Scheme). It is therefore not practicable to undertake an assessment of the potential landscape impacts of the construction and operation of the proposed scheme in the absence of embedded mitigation.

13.4.2. A summary of the potential impacts during construction and operation is set out below with more detail given in Appendix 13.5: Landscape Character Assessment Impacts.

# **Construction Phase Impacts**

- 13.4.3. Construction impacts are generally considered to be temporary adverse and would typically include:
  - Vegetation clearance to facilitate construction is anticipated to occur during the initial mobilisation phase, requiring the removal of landscape features that contribute to the vegetation cover, the result will be newly exposed views of the wider landscape and the construction activity therein;
  - Areas of additional tree clearance as a result of potential safety concerns relating to the windthrow effect of vegetation removal on the fringes of woodland, particularly associated with plantation woodland;
  - Loss of embankments and/or rock outcrops;
  - · Disturbance caused by blasting related to rock cuts being reformed;
  - Temporary spoil heaps, material storage, and site compounds will occur throughout the construction phase, the result will be frequent changes to the perception of the existing A9 and the broader landscape associated with the corridor;
  - · Lighting associated with night-time working;
  - Plant, machinery and traffic management will be conspicuous in views of the existing A9 corridor, highlighting the presence of the A9 and the changes occurring within it; and
  - Temporary realignments and diversions will result in a broader footprint associated with the existing A9 corridor and adjacent landscape.
- 13.4.4. More specifically, there are some areas where significant adverse impact would be more likely to potentially occur associated with major structures and/or junctions or rock cuts:
  - Aviemore South Junction;
  - Granish Junction;
  - Construction of a new bridge at the River Dulnain Crossing;
  - Black Mount Junction;
  - Construction of a new bridge at Slochd Beag; and
  - Rock cuts at Slochd Beag, Slochd Mor and Slochd Summit.
- 13.4.5. A detailed description and assessment of the impacts of construction on the landscape resource is given in Appendix 13.5 Table 1.1.
- 13.4.6. In summary, the construction phase impacts on the LCAs are:
  - Badenoch: Loch Alvie to Inverdruie LCA: The significance of impact is moderate substantial adverse due, in the main, to construction activity for the Aviemore South Junction overbridge and the introduction of new retaining walls and drainage features south of Aviemore in association with mainline widening.
  - The Slochd LCA: The significance of impact is moderate- substantial adverse due to rock cuts and the construction of new retaining walls, drainage features and underpasses associated with mainline widening.



- Strathspey: Inverdruie to Pityoulish LCA: The significance of impact is moderate adverse due to the construction of underpasses and associated retaining walls associated with mainline widening.
- Strathspey: Pityoulish to Boat of Garten LCA: The significance of impact is slightmoderate adverse due to in the main to the construction of Granish Junction in addition to mainline widening.
- Dulnain Strath LCA: The significance of impact is slight adverse as while the Dulnain Bridge and associated retaining wall are new elements and large structures, the impact on the LCA, which is extensive, is localised.
- Western Dava Moor Uplands LLCA (sub-LLCA of the Southern Uplands LCA for the purposes of this assessment): The significance of impact is slight adverse as while the rock cuts at Slochd Summit will have an impact, it is localised within an extensive LCA.

# **Operational Phase Impacts**

- 13.4.7. Potential impacts would typically occur due to the following:
  - Alteration of the local landscape character affecting the perception of landscape designations due to loss of existing landscape elements such as established woodland, changes to rock faces due to rock cuts and changes to existing views;
  - Changed appearance of landform due to new earthworks such as embankments and cuttings;
  - Changed appearance of rock faces due to new rock cuts;
  - The addition of new bridge structures across rivers, other roads, railway and small watercourses;
  - Introduction of new infrastructure elements such as new including retaining walls, signage and attenuation ponds and access tracks that could affect the overall pattern of the landscape;
  - The introduction of lighting to previously unlit areas; and
  - The 'opening up' of the views due to vegetation removal.
- 13.4.8. The CNPA Report No. 375 states that in relation to the Special Landscape Quality of Dark Skies: 'At night, even the complete absence of colour, a pitch black sky bespeckled only with the light of the stars, is a distinctive feature as dark skies become increasingly rare in Britain'. In terms of this assessment, lighting is being proposed as a replacement to where it already exists (underpasses in Aviemore), or within the underpasses at Slochd where it will be a new introduction but contained within the underpasses. Granish Junction is the only location where lighting will be a new element. This has been assessed within the Strathspey: Pityoulish to Boat of Garten LCA and also within Chapter 14: Visual Impact.
- 13.4.9. A detailed description and assessment of the impacts of operation on the landscape resource is given in Appendix 13.5: Landscape Character Assessment Impacts.
- 13.4.10. In summary, the operational phase impacts on the LCAs are:
  - Slochd LCA: The significance of impact is slight adverse in the WY1 resulting from the reduction in woodland associated with the new Black Mount Junction and mainline widening in addition to the fresh appearance of new rock cuts at Slochd. However, the Slochd rock cuts afford an opportunity to remove the existing mesh southbound and, although the rock plug northbound will receive mesh treatment to

A9P11-AMJ-EGN-Z\_ZZZ\_ZZ-RP-EN-0035

facilitate its retention, this will follow recent best practice guidance. The overall extent of mesh will be reduced and be applied to reduce visual impact. By the SY15, landscape mitigation planting, in addition to natural regeneration and natural weathering of the rock cuts will result in a slight beneficial impact.

- Badenoch: Loch Alvie to Inverdruie LCA: While the significance of impact is locally
  moderate in close proximity to the mainline where the retaining walls south of
  Aviemore, and drainage features will be new elements. the significance of impact for
  the LCA as a whole in the WY1 is slight-moderate adverse resulting from the addition
  of Aviemore South Junction being perceptible in more elevated and open areas of the
  LCA. This will reduce to slight adverse in SY15 following establishment of landscape
  mitigation.
- Strathspey: Inverdruie to Pityoulish LCA: The significance of impact in the WY1 is slight-moderate adverse resulting from new embankments, drainage features, reduction in woodland and vegetation to screen or filter views of traffic, new embankments including underpasses at Craigellachie, Milton and High Burnside and retaining walls at Milton. This will result to slight adverse impact for this LCA in the SY15 following establishment of landscape mitigation.
- Strathspey: Pityoulish to Boat of Garten LCA: While the LCA in very close proximity to the mainline will have new elements to include new earthworks, drainage features and retaining walls, the impact in the WY1 is slight adverse for the LCA as a whole. This will reduce to negligible-slight adverse impact for this LCA following the establishment of landscape mitigation in the WY15.
- Dulnain Strath LCA: The significance of impact in the WY1 is slight resulting from reduction in woodland and increased visibility of traffic movement and newly formed embankment. The bridge and associated retaining wall will be read as part of the existing strath crossing point rather than a separate entity so that the magnitude of change is low. Following establishment of landscape mitigation planting in the SY15, the impact will be negligible-slight adverse for this LCA.
- Western Dava Moor Uplands LLCA (sub-LLCA of the Southern Uplands LCA: There is negligible-none significance of impact on this LCA given the extent of the LCA and that the rock cuts will be improved by the overall reduction in mesh. By the SY15, a combination of natural weathering and plant establishment on the rock faces will appear to 'soften' the new rock cuts so that the significance of impact is slight beneficial.

# 13.5. Mitigation

- 13.5.1. Landscape mitigation is concerned with mitigating likely significant adverse impact of the proposed scheme on the landscape receptor.
- 13.5.2. Mitigation identified early in the process, or embedded mitigation, is integral to the design and has been described in earlier chapters (Chapter 4: Design Development and Chapter 5: The Proposed Scheme).
- 13.5.3. Embedded mitigation includes steepening or relaxation of slope gradients and slope profiling (refer to Appendix 13.1: Slope Profiling), aesthetic treatment to structures, landscape influence in the design of rock cuts (refer to Appendix 13. 2: Rock Cuts), seeding of embankments, use of extra heavy standard trees and design of lighting, which are all in effect in the opening year (WY1). Embedded mitigation also includes the removal of the requirement of a 'crank' (i.e. an angled return atop the fence) for otter fencing/combined otter/badger fencing to reduce impact on the landscape and visual resource.

13.5.4. Embedded mitigation in the form of earthworks has been integral at the following locations which is considered to have a beneficial impact on landscape receptors:

- Slopes to carriageway steepened to 1:2/1:2.5 to reduce the requirement for the removal of adjacent woodland at chainage 5500-7000 northbound (Craigellachie NNR);
- Slope graded out to 1:4 to integrate with the adjacent landform at chainage 10650-11000 southbound (Laggantygown);
- Slopes at chainage 22300-22650 (Slochd) steepened to 1:1 to reduce extent of soil nailing;
- Slopes at chainage 22650-23000 (Slochd) relaxed to aid integration with landform;
- Appropriate siting of SuDS features;
- Lighting, where used, shall have lighting columns which are not apparent above the adjacent tree line and utilise luminaires which are selected to avoid upward glare at:
  - Chainage 4700 Craig Dhu Underpass;
  - Chainage 7400 Old Meall Road, Aviemore;
  - Chainage 8750 Granish Junction;
  - Chainage 23700 and 24400 NMU Underpasses at Slochd (lighting restricted to within the underpasses).
- Design of NMU Underpasses at Slochd to reflect their role as part of the gateway to the CNP and the enhance the user experience;
- Use of natural stone treatment on the following structures:
  - Craig Dhu Underpass, Craigellachie NMU Underpass, Milton NMU Underpass, Slochd Mhuic South Underpass and Slochd Mhuic North Underpass;
  - Retaining wall between the A9 and the B9152 south of Aviemore, Craig Dhu Underpass Retaining Wall, Milton NMU Underpass – High Burnside Underpass retaining wall; and
- Design of rock cuts at the following locations:
  - Slochd Beag, Slochd Mor and Slochd Summit.
- 13.5.5. Standard and project specific mitigation measures (beyond the embedded mitigation) are set out in the Landscape and Ecology Mitigation drawings (Figure 13.4) and detailed in Appendix 13.5: Landscape Character Assessment Impacts and in Chapter 21: Schedule of Environmental Commitments (Table 21.7: Landscape and Visual) and therefore they are not repeated in full here but are summarised in table 13.7 and 13.8. The location and timing of measures is included in Chapter 21 (Schedule of Environmental Commitments) along with other general A9 standard mitigation and project specific mitigation relating to other topics. The landscape mitigation measures that apply to all parts of the proposed scheme are described within the following paragraphs. Location specific measures are illustrated on Figure 13.4 Sheets 1-18, detailed in Figure 13.4 Sheets 19-30, and described, along with the impacts, in Section 13.6 (Residual Impacts).
- 13.5.6. Mitigation has been informed by Fitting Landscapes: Securing more Sustainable Landscapes and DMRB Volume 10.
- 13.5.7. Mitigation has also been informed by the A9 Strategic Environmental Design Principles (Appendix 13.3: Landscape Objectives and Appendix 4.1: Design Principles), the Special Landscape Qualities of the CNP (Appendix 13.4: Special Qualities of the

Cairngorms National Park) and informed by consultation with CNPA. Mitigation is detailed in Appendix 13.4 and Appendix 13.5 and is summarised below.

#### Table 13.7: Standard Mitigation

Mitigation Item	Description	
SMC-LV1	The construction programme will be kept to the minimum practicable time to reduce the duration of any landscape and visual impacts and areas will be cleared for construction as close as possible to works commencing and topsoiling, reseeding and planting shall be undertaken as soon as practicable after sections of work are complete.	
SMC-LV2	As far as practicable, construction plant and materials storage areas will be appropriately sited to minimise their landscape and visual impact.	
SMC-LV3	Construction sites will be kept tidy (e.g. free of litter and debris).	
SMC-LV4	Work during hours of darkness will be avoided as far as practicable, and where necessary, directed lighting will be used to minimise light pollution/glare. Lighting levels will be kept to the minimum necessary for security and safety.	
SMC-LV5	To protect soil quality for the purposes of landscape planting, the following measures will be implemented:	
	<ul> <li>Uncontaminated topsoil for re-use shall be stored in un-compacted mounds no more than 2m in height, and stored separately from subsoil material. Topsoil stripped from areas designated as Ancient Woodland shall be stored separately to all other topsoil and sub-soil material, in un-compacted mounds no more than 2m in height.</li> </ul>	
	• Stripped topsoil shall be used in areas of the same proposed vegetation type to utilise the existing natural seed bank.	
	• Subsoil in planting areas shall be replaced after construction and ripped to a minimum of 450 mm prior to topsoiling and planting.	
	• Proposed planting areas in existing arable and pasture land, not subject to construction activity, will be ripped to 600 mm to alleviate compaction.	
SMC-LV6	The construction will be managed such that the loss of any existing woodland, scrub, heath, mire, grassland vegetation, marshland, swamps and isolated trees and shrubs not affected by the permanent works is minimised.	
SMC-LV7	All existing trees and shrubs not affected by the construction of the permanent works shall be fenced off with a suitable type of temporary fencing in accordance with BS5837. Fencing shall extend to the drip line of the tree canopies (unless otherwise agreed by an arboricultural advisor), and shall be erected prior to any construction activities in that area and shall remain for the entire period of construction in that area.	
n/a (note)	Further to the above, <b>Mitigation Items SMC-E7 and SMC-E8</b> (as detailed in Table 6: Ecology and Nature Conservation) will be implemented to protect vegetation which is identified to be retained.	

#### Table 13.8: Specific Mitigation

Mitigation	Description
Item	
P11-LV8	Earthworks/Rock cut proposals will:
	<ul> <li>Use retaining walls where appropriate to avoid extensive cuttings into slopes or large embankments which increase land disturbance or avoid the HML;</li> </ul>
	<ul> <li>where rock cuttings are required, create formations which are varied and reflect the structure of the rock;</li> </ul>
	<ul> <li>rock cutting shall incorporate embayments, vary the height of ledges, and utilise bunds on the crest of benches to contain rockfall, either alone or in combination, to achieve an irregular and naturalistic appearance;</li> </ul>
	<ul> <li>where mesh is used as a means of engineering control for rock cuts, the mesh will be contoured to the rock face and not merely 'draped' upon it. A low diameter wire and large apertures is used with faceplate areas minimised. The mesh boundary shall be folded back to the manufacturers minimum excessive tails;</li> </ul>
	<ul> <li>sensitive grading of earthworks to integrate with surrounding landform and/or reduce requirement for/extent of felling;</li> </ul>
P11-LV9	The following shall apply to SuDS features:
	<ul> <li>earthworks shall integrate with the surrounding landform;</li> </ul>
	<ul> <li>planting of woodland shall be incorporated near SuDS features, where appropriate, to enhance wildlife and create visual interest;</li> </ul>
P11-LV10	Noise barriers shall be screened with the use of localised native planting to help reduce visual impact.
P11-LV11	The design of structures along the entire proposed scheme has been informed by specialist aesthetic advice and design meetings in order to reduce impacts on the landscape and visual receptors. This includes the use of natural stone treatments on select structures.
P11-LV12	The design shall incorporate low level natural stone walls to replicate the local landscape character and enhance the 'gateway' to Aviemore.
P11-LV13	The design of the junctions shall reflect their role as 'gateways' to Aviemore. The design of Aviemore South, Granish, Black Mount Junction loops and the area at the drainage channel structure at Slochd Mhuic South underpass shall incorporate large boulders to reflect the local landscape character and help to integrate the structures into the landscape.
P11-LV14	Retention of existing trees and vegetation and incorporation with new planting proposals. Trees shall only be removed where it can be demonstrated that this is required for construction or safety purposes.
P11-LV15	Mitigation planting to replace trees lost during the construction of the proposed scheme.
P11-LV16	Landform squared off to maintain/create bund to contribute to screening of views for receptors.
P11-LV17	Use of landlocked areas for landscape mitigation.
P11-LV18	Planting shall aid integration with the landscape character, and be predominantly based on native species established in the area.
P11-LV19	Species rich mixes for the majority of grass verges with the aim of integrating these into the wider landscape character. The exception to this

Mitigation Item	Description
	will be the use of less diverse grass species in areas associated with visibility splays which are capable of withstanding regular cutting.
P11-LV20	Large specification trees shall be used where screening or filtering of views is required in the year of opening, or where the area acts as a 'gateway' to a key location.
P11-LV21	Topsoil shall be incorporated to the new rock cut configurations to assist natural regeneration. Where it is considered that a more immediate solution is required, hydroseeding shall be undertaken.
P11-LV22	Tarmac surface on access tracks to SuDS will be limited to those tracks which lead to residential properties.
P11-LV23	Planting or density of planting shall be light to align with landscape character or to afford open or glimpsed views of landscape features.
P11-LV24	The detail of the mammal fencing shall be designed to minimise visual impact.
P11-LV25	<ul> <li>The detail of the lighting shall:</li> <li>restrict column heights to below the apparent tree line</li> <li>utilise luminaires selected to avoid upward light; and</li> <li>utilise G4 glare glass.</li> </ul>

# **Mitigation during Construction**

- 13.5.8. During the construction phase, standard mitigation measures will be applied in line with the commitments across the A9 Dualling Programme. These are detailed in Chapter 21: Schedule of Environmental Commitments Table 21.7 and are not repeated here.
- 13.5.9. Whilst the mitigation measures described in detail in the Schedule of Environmental Commitments will reduce the impact from construction, the impacts cannot be entirely mitigated due to the nature and extent of construction and some adverse impact will remain. Standard or project specific mitigation within each LCA for which there is considered to be significant impact is set out below.

# Mitigation Within LCAs During Construction

- 13.5.10. General standard construction mitigation [SMC1-CP1-15] is set out within Table 21.1 in Chapter 21: Schedule of Commitments. In addition, standard mitigation for landscape and visual [SMC-LV1-7] is set out within Table 21.7 and below. In summary this mitigation includes:
  - Site clearance to take place as close to construction as possible, with seeding and planting taking place as soon after construction as possible;
  - Storage areas appropriately sited to minimise landscape and visual impact;
  - Construction sites to be kept tidy;
  - Work during darkness to be avoided wherever possible and appropriate directional lighting used;
  - Soil quality measures will be adhered to;
  - The loss of existing vegetation will be minimised;



- All trees not directly affected by the construction works shall be temporarily fenced off to BS5837; and
- Further to the above, Mitigation Items SMC-E7 and SMC-E8 (as detailed in Table 6: Ecology and Nature Conservation) will be implemented to protect vegetation which is identified to be retained.
- 13.5.11. With the construction mitigation commitments [SMC LV1-7] in place there will be a moderate-substantial adverse impact on the Badenoch: Loch Alvie to Inverdruie LCA during the construction period.
- 13.5.12. With the construction mitigation commitments [SMC LV1-7] in place there will be a moderate adverse impact on the Strathspey: Inverdruie to Pityoulish LCA.
- 13.5.13. With the construction mitigation commitments [SMC LV1-7] in place there will be a slight-moderate adverse impact on the Strathspey: Pityoulish to Boat of Garten LCA.
- 13.5.14. With the construction mitigation commitments [SMC LV1-7] in place there will be a slight adverse impact on the Strathspey: Dulnain Strath LCA.
- 13.5.15. With the construction mitigation commitments [SMC LV1-7] in place there will be a slight adverse impact on The Slochd LCA.

Mitigation Within Landscape Designations During Construction

13.5.16. While there is impact from construction in localised areas of the CNP (close to the Proposed Scheme), for the CNP as a whole, this will not be significant. All other landscape or landscape-related designations which have not been scoped out have been considered as part of the wider LCA in which they sit. These include the Drynachan, Lochindorb and Dava Moors SLA, the Kinrara GDL and Doune of Rothiemurchus GDL. No impact has been identified for these.

# **Mitigation during Operation**

- 13.5.17. Landscape Mitigation proposals have been designed in accordance with the 'Landscape Principles' identified in the SEA, as listed in Appendix 13.3: Landscape Objectives and Appendix 4.1: Design Principles. The road alignment and mitigation measures have been designed to respond to the landscape qualities and key characteristics along the route, including tying in with and reflecting existing vegetation patterns and landform and using locally occurring plant species and materials.
- 13.5.18. The Landscape and Ecological Mitigation drawings (Figure 13.4 Sheets 1-18), along with detailed drawings (Figure 13.4 Sheets 19-30) provide context and details of the mitigation. Key landscape mitigation measures which have been applied across the scheme include:
  - Earthworks to be steepened or relaxed to avoid impact on designated land, retain elements of the landscape which afford screening or contribute to the landscape character or to achieve best landscape fit [P11-LV8];
  - Naturalistic form of SuDS ponds and appropriate planting to integrate into the landscape [P11-LV9];
  - Where noise barriers are used they shall be softened or screened with planting appropriate to the location [P11-LV10];
  - Retention of existing trees and vegetation wherever possible [P11-LV14];

÷

- Mitigation through seeding [P11-LV19] and planting [P11-LV18], to tie in with existing landscape character and to provide replacement screening of the A9, has been developed as part of the landscape and ecology mitigation (see Figure 13.4 Sheets 1-18);
- Avoidance, or use of light planting form or density where key views are to be retained or there is an opportunity to enhance views [P11-LV23];

Use of large specification trees in sensitive locations for the purpose of maintaining landscape character or screening views [P11-LV20]; and

- Avoidance of a 'crank' on otter/combined mammal fencing (as agreed with Scottish Natural Heritage at the A9 Dualling Environmental Steering Group) [P11-LV24].
- 13.5.19. The Landscape and Ecological Mitigation drawings (Figure 13.4 Sheets 1-18) and detailed drawings (Figure 13.4 Sheets 19-30) provide details of the mitigation. Key landscape mitigation measures which at select areas/structure within the scheme include:
  - Lighting columns shall be 6-7m high to avoid being apparent above the tree line and luminaires which avoid upward glare and with G4 glare glass.

#### Mitigation Within LCAs During Operation

- 13.5.20. Mitigation within the LCAs is set out in detail in Appendix 13.5: Landscape Character Assessment Impact and is summarised below.
- 13.5.21. The potential impact on the Badenoch: Loch Alvie to Inverdruie LCA will reduce due to mitigation planting reflecting the character of the area along the mainline, at Aviemore South Junction and at Lynwilg [P11-LV18]. Natural stone treatment to the retaining walls visible from the B9152 south of Aviemore will help to reduce impact [P11-LV11].
- 13.5.22. The potential impact on the Strathspey: Inverdruie to Pityoulish LCA reduce due to the sensitive design of SuDS features at Craigellachie [P11-LV9], use of natural stone treatment to NMU underpasses and the retaining walls at Milton and High Burnside [P11-LV11] and mitigation planting which will help to integrate the road with the landscape character of the birch woodland associated with Craigellachie [P11-LV18].
- 13.5.23. The potential impact on the Strathspey: Pityoulish to Boat of Garten LCA will reduce due predominantly to the establishment of replacement tree cover [P11-LV18] and the selection of lighting columns at Granish Junction which are 6-7m high to avoid being apparent above the tree line, luminaires which are selected to avoid upward glare and which utilise G4 glare glass [P11-LV25].
- 13.5.24. The potential impact on the Strathspey: Dulnain Strath LCA will reduce due to the establishment of replacement vegetation cover [P11-LV18] balancing with the retention of the 'open' strath [P11-LV23] which will maintain the important juxtaposition between the strath and the landscape of wooded 'enclosure' to the immediate north and south.
- 13.5.25. The potential impact on the Slochd LCA will reduce due to mitigation planting [P11-LV18] in the vicinity of the Black Mount Junction integrating it into the conifer woodland character. At Slochd Beag, Slochd Mor and Slochd Summit sensitive design of the rock cuts [P11-LV8], reduction in extent of mesh [P11-LV8], and promotion of natural regeneration [P11-LV21] will reduce impact and is likely to result in improvement.
- 13.5.26. The potential impact on the Western Dava Moor Uplands LLCA (sub-LLCA of the Southern Uplands LCA will reduce due to the sensitive design of rock cuts [P11-LV8],



reduction in extent of mesh [P11-LV8] and enhancement of natural regeneration [P11-LV21].

# **13.6. Residual Impacts**

- 13.6.1. Residual impacts are those remaining after mitigation has been implemented. These are detailed in Appendix 13.5; Landscape Character Assessment Impacts. Those which are considered to be significant for EIA purposes are highlighted here. Significance is taken to be an impact of moderate or above.
- 13.6.2. There is significant impact predicted for three Landscape Character Areas during the construction period. Badenoch: Loch Alvie to Inverdruie LCA and Slochd LCA will be affected by a moderate-substantial adverse impact during construction. For the former, this is mainly due to the construction of Aviemore South Junction and retaining walls south of Aviemore. For the latter, it is mainly due to the works associated with rock cuts, including blasting, construction of retaining walls and the Slochd Beag bridge structure. Strathspey: Inverdruie to Pityoulish LCA will be affected by a moderate adverse impact during the construction period. In the main this is due to mainline work and associated replacement underpasses and retaining walls within the town of Aviemore.
- 13.6.3. There are no significant impacts on the LCAs during operation.

<sup>&</sup>lt;sup>i</sup> Scottish Government Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 5.

<sup>&</sup>lt;sup>ii</sup> Highways England (2010). Interim Advice Note (IAN) 135/10. Landscape and Visual Effects Assessment.

<sup>&</sup>lt;sup>iii</sup> Landscape Institute and the Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment 3<sup>rd</sup> edition. Routledge.

<sup>&</sup>lt;sup>iv</sup> Transport Scotland (2014) Fitting Landscapes: Securing more sustainable landscapes.

<sup>&</sup>lt;sup>v</sup> Transport Scotland (2014). A9 Programme Strategic Landscape Assessment (SEA) Environmental Report Addendum. Appendix F: Strategic Landscape Review Report.

vi Cairngorms National Park (2009). Landscape Character Assessment

<sup>&</sup>lt;sup>vii</sup> Inverness District Landscape Character Assessment: Scottish Natural Heritage Review No. 114 (Richards, J).

<sup>&</sup>lt;sup>viii</sup> Moray and Nairn Landscape Assessment: Scottish Natural Heritage Review No. 101 (Turnbull Jeffrey Partnership, 1998).

<sup>&</sup>lt;sup>ix</sup> Cairngorms National Park Authority. Cairngorms National Park Partnership Plan 2017-2022.

<sup>×</sup> Cairngorm National Park Authority. Cairngorm National Park Local Development Plan 2015.

<sup>&</sup>lt;sup>xi</sup> The Highland Council. Highland Wide Local Development Plan 2012.

<sup>&</sup>lt;sup>xii</sup> Scottish Natural Heritage and the Cairngorms National Park Authority (2008). Wildness Study in the Cairngorms National Park.

xiii Scottish Natural Heritage (2017). Assessing Impacts on Wild Land – Technical Guidance.

xiv Scottish Natural Heritage and the Cairngorms National Park Authority (2010). The Special Qualities of the Cairngorms National Park. SNH Commissioned Report No. 375.

<sup>&</sup>lt;sup>xv</sup> Scottish Natural Heritage (2010). The Special Qualities of the National Scenic Areas. Commissioned Report No. 374.

<sup>&</sup>lt;sup>xvi</sup> Cairngorms National Park. Cairngorms Landscape Toolkit. Accessed online <u>http://cairngorms.co.uk/park-authority/planning/landscape-toolkit</u> Last accessed online 07/03.18.

<sup>&</sup>lt;sup>xvii</sup> Historic Environment Scotland. Inventory of Gardens and Designed Landscapes. Accessed online Last accessed 07.03.18.