

13 Landscape

13.1 Introduction

- 13.1.1 This chapter presents the Design Manual for Roads and Bridges (DMRB) Stage 3 Environmental Impact Assessment (EIA) of the Proposed Scheme for A9 Dualling, Project 8 – Dalwhinnie to Crubenmore. It considers the potential construction and operational impacts on the landscape resource associated with the Proposed Scheme as described in **Chapter 5**.
- 13.1.2 This chapter includes:
- Baseline conditions within the study area relating to landscape character and landscape receptors
 - Potential impacts of the Proposed Scheme, with regard to the identified baseline
 - Anticipated mitigation measures
 - Residual effects that are anticipated after mitigation
- 13.1.3 This chapter should be read in conjunction with **Chapter 14**. The potential effect on Views from the Road is considered in **Chapter 9**.

13.2 Approach and Methods

- 13.2.1 The landscape assessment approach and methodology has been refined to deliver a bespoke best practice approach that enables a thorough evaluation of the potential landscape effects within the highly scenic landscape surrounding the Proposed Scheme.
- Scope and Guidance**
- 13.2.2 This chapter, as part of the EIA, has been undertaken with reference to the Highways Agency *et al*, Interim Advice Note (IAN) 135/10, DMRB Volume 11, Section 3, Part 5, Landscape Effects, 1993 and the Scottish Government Planning Advice Note 1/2013, Environmental Impact Assessment.
- 13.2.3 The landscape assessment has also been undertaken in accordance with other guidance, including Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (Landscape Institute and the Institute of Environmental Management and Assessment, 2013) and Fitting Landscapes: Securing More Sustainable Landscapes (Transport Scotland, 2014).
- 13.2.4 Landscape Architects across the A9 Dualling Programme have worked together through the A9 Dualling Landscape Forum to agree a common approach to assessment, to ensure consistency in methodology and terminology for assessing Landscape and Visual effects.
- 13.2.5 The A9 Dualling Programme Strategic Environmental Assessment (SEA) Environmental Report, June 2013, includes a series of strategic considerations and key design implications, which have been taken into account within this landscape assessment, the design development for the Proposed Scheme and mitigation.
- 13.2.6 Consultation and engagement with Scottish Natural Heritage (SNH) and the Cairngorms National Park Authority (CNPA) has been undertaken during design development as detailed in **Chapter 7** of this Environmental Statement (ES).

Study Area

- 13.2.7 The Proposed Scheme lies within the Cairngorms National Park (CNP) and extends along the River Truim from the relatively enclosed upper reaches near Drumochter Lodge, to the wide strath at Dalwhinnie and Cuaich, to the narrowing of the valley again at Crubenmore. **Drawings 13.1 to 13.5 in Volume 3** show this area. The study area includes the visual envelope of the A9 between Drumochter and Crubenmore. The area includes the spectacularly dramatic scenery around Dalwhinnie and is considered typical of the Highland landscape.
- 13.2.8 The study area was initially informed by the preparation of a theoretical Zone of Visual Influence (tZVI) for the existing A9, which is shown on **Drawing 13.1 in Volume 3**. The extent of the tZVI was initially set to 10km either side of the existing A9. TZVIs are based upon bare ground topography and do not take into account any screening or filtering of visibility by local landform, vegetation or built form, and are therefore a worst case indication of theoretical visibility.
- 13.2.9 Following consideration of the initial tZVI (existing A9, 10km), the study area for this landscape assessment was reduced to 5km, with the greatest effects anticipated within 2km, due to the nature of the upland terrain surrounding the Proposed Scheme. The 2km and 5km distance buffers are also presented on **Drawing 13.1 in Volume 3**.
- 13.2.10 As established within the A9 Dualling Programme SEA Environmental Report Addendum, Appendix F - Strategic Landscape Review Report, dated March 2014 (within Section 6 – Key issues), the landscape effects associated with the Proposed Scheme are anticipated to be limited to the immediate local level and the potential effects on the wider landscape character is considered to be limited.

Baseline Data Sources

- 13.2.11 Two key published studies have established the baseline landscape character assessment for the study area:
- *'Cairngorms National Park Landscape Character Assessment: Final Report'*
Alison Grant, published by CNPA, 2009
 - *'Cairngorms Landscape Character Assessment'*
Turnbull Jeffery Partnership, published by SNH, 1996
- 13.2.12 Other key documents relating to the landscape character include:
- *'The Special Landscape Qualities (SLQs) of the Cairngorms National Park'*
SNH and CNPA, 2010 (SNH Commissioned Report, No. 375)
 - *'A9 Dualling Programme Strategic Environmental Assessment (SEA) and Strategic Landscape Review'* (Halcrow/ CH2M HILL for Transport Scotland), 2014
- 13.2.13 Additional baseline information was obtained via site walkovers and desk studies, including reviews of the following information sources:
- 1:5,000, 1:10,000, 1:25,000 and 1:50,000 scale Ordnance Survey mapping
 - Google Earth web-based photography
 - A9 Dualling commissioned aerial photography (BLOM, 2014)
 - Geographical Information Systems (GIS) datasets (including those obtained through the CH2M Fairhurst Joint Venture (CFJV) GIS team in liaison with relevant stakeholders)

- Detailed site assessments made by four CFJV landscape architects over a series of site visits in 2015-2017
- Three-dimensional (3-D) visualisation model of the existing A9 and of the Proposed Scheme

Evaluation Approach

- 13.2.14 This EIA has been undertaken using the approach outlined below, where the level of significance of an effect is assessed based on the value of the landscape resource; the susceptibility to change of the landscape resource, elements, and character, which together provide an indication of the sensitivity of the landscape to change; and the magnitude of effect.
- 13.2.15 In accordance with GLVIA3, there is less reliance on simplistic matrices and more on professional judgement in assessing the significance of the likely impacts. Also, in accordance with GLVIA3, the assessment of sensitivity combines judgements on the value attributed to a receptor and the susceptibility of that receptor to the specific type of development proposed.
- 13.2.16 All effects have been considered but only those that are Moderate and above are considered significant. These are reviewed in detail as they are considered to highlight the key impacts of the Proposed Scheme.

Assigning Sensitivity

- 13.2.17 The impact assessment has been undertaken using the approach outlined below, where the level of significance of an effect is assessed based on the *value* of the landscape resource, the *susceptibility* to change of the landscape resource, elements and character, which together provide an indication of the *sensitivity* of the landscape to change.

Landscape Value

- 13.2.18 GLVIA3 defines landscape value as ‘*the relative value that is attached to different landscapes by society*’. A review of existing designations (e.g. National Scenic Area, Special Landscape Area, etc.) is usually the starting point in understanding value; although it should be noted that value and/ or associated susceptibility may not necessarily be uniform across a designated area.
- 13.2.19 There may also be situations where an undesignated landscape is of value and/ or susceptible in local terms. **Table 13-1** sets out the relative importance of landscape designations and descriptions as considered within this assessment.

Table 13-1: Criteria for assessing value of landscape designations

Designation	Description	Value
World Heritage Sites	Unique sites, features or areas identified as being of international importance according to UNESCO criteria Consideration should be given to their settings, especially where these contribute to the special qualities for which the landscape is valued	International/ National
National Parks, National Scenic Areas	Areas of landscape identified as being of national importance for their natural beauty (and in the case of National Parks the opportunities they offer for outdoor recreation)	
Historic Scotland's Inventory of Gardens and Designed Landscapes	Gardens and designed landscapes included on the inventory	
Local Landscape Designations (such as Special or Local Landscape Areas, Areas of Great Landscape Value and similar) included in local planning documents	Areas of landscape identified as having importance at the local authority level	Local

- 13.2.20 Establishing the value attached to undesignated areas requires examination of individual elements of the landscape. A number of criteria are to be considered, as relevant, to help determine value as detailed in **Table 13-2** below. For this Project, only **Table 13-1** is relevant as the entire project is within the Cairngorms National Park (CNP). However, through discussion with the Landscape Forum, it was agreed that, to provide a consistent approach to methodology across the A9 Dualling Programme, **Table 13-2** would be included in all assessment methodologies. **Table 13-1** alongside professional judgement will be used to make an overall assessment for each receptor in terms of high, medium and low value. As previously noted, as Project 8 is within the CNP the majority of items within the baseline are likely to be of high value, as a National Park is a nationally important designation. However, other features, depending on things such as rarity may be of medium or low value, this will be discussed for receptors within the baseline **section 13.3**.

Table 13-2: Criteria for assessing value of non-designated landscapes

Attribute	Description
Landscape Quality (Condition)	A measure of the physical state of the landscape; its intactness and the condition of individual elements
Scenic Quality	General appeal of the landscape to the senses
Rarity	The presence of rare elements, features or landscape types
Representativeness	Characteristic/ feature/ element considered a particularly important example
Conservation/ Cultural Interest	The presence of wildlife, earth science or cultural heritage interest which contributes positively to the landscape
Recreation Value	Evidence that the landscape is valued for recreational activities where experience of the landscape is important
Perceptual Aspects	Evidence that a landscape is valued for its wildness/ tranquillity
Associations	Relevant associations with notable figures, such as writers or artists, or events in history that contribute to landscape value

Landscape Susceptibility

- 13.2.21 Susceptibility is defined as the ability of the landscape receptor to accommodate the Proposed Scheme without undue negative consequences. The Proposed Scheme involves online dualling of an existing single carriageway road and this has direct relevance to the susceptibility of the landscape receptors, as the road already exists within the baseline, therefore receptors susceptibility to change is likely to be lower. Susceptibility of landscape receptors to change is assessed using the criteria detailed in **Table 13-3** and will be set out for each receptor within **section 13.3**.

Table 13-3: Landscape susceptibility criteria

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

Evaluation of Landscape Sensitivity

13.2.22 **Table 13-4** outlines the criteria used in the evaluation of landscape sensitivity, based on a combination of both susceptibility and value.

Table 13-4: *Landscape sensitivity criteria*

Sensitivity	Criteria
High	Landscape elements of particular distinctive character, which are highly valued and considered susceptible to relatively small change. Landscapes which by nature of their character and value would have very limited capacity to accommodate change of the type proposed.
Medium	Landscape of moderately valued characteristics considered reasonably tolerant of change Some ability to accommodate the proposed option without undue detriment. 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.

Assigning Magnitude of Effects

13.2.23 The magnitude of landscape effects is assessed in terms of size or scale, the geographical extent of the area influenced, duration and reversibility.

13.2.24 The assessment of the size and/ or scale of change in the landscape considers the following factors:

- The extent/ proportion of landscape elements lost or added
- The contribution of that element to the landscape character and the degree to which aesthetic/ perceptual aspects are altered
- Whether the change is likely to alter the key characteristics of the landscape, which are critical to its distinctive character

13.2.25 The criteria used to assess the size, scale and geographic extents of landscape effects was based upon the amount of change that would occur as a result of the Proposed Scheme, described in **Table 13-5**.

Table 13-5: *Magnitude of landscape effects*

Magnitude	Criteria
High	Notable change in landscape characteristics over an extensive area, ranging to very intensive change over a more limited area.
Medium	Ranging from minor changes in landscape characteristics over a wide area, to notable changes in a more limited area.
Low	Minor or virtually imperceptible change in any area or to any components of the landscape.
None	No perceptible change to the landscape resource.

13.2.26 In accordance with GLVIA3, the evaluation of magnitude also considers the duration and reversibility of landscape effects. The duration of effects are judged on the following scale:

- Short-term: under 1 year
- Long-term: up to 15 years

- 13.2.27 However, in this location it was also necessary to consider effects over a longer time frame (e.g. up to 25 years) as vegetation establishment in areas with high altitude (and latitude), high rainfall and frequent low temperatures, such as found in the study area, will be slow. This is based on informed professional judgement as discussed through the Landscape Forum.
- 13.2.28 Temporary construction-phase effects are often short-term and reversible and are therefore likely to have a lower magnitude of effect.

Assigning Significance of Effect

- 13.2.29 The significance of landscape effects was determined through consideration of both the sensitivity of the landscape receptors and the predicted magnitude of effect as a result of the Proposed Scheme. GLVIA3 advocates that Landscape and Visual Impact Assessment (LVIA) is an evidence-based process combined with professional judgement and that numerical scoring or weighting criteria should be avoided.
- 13.2.30 When GLVIA3 was released, the Landscape Institute noted that: *“GLVIA3 places greater emphasis on professional judgement and less emphasis on a formulaic approach”*. Therefore, a matrix for assessment of significance is not utilised and a reasoned justification for the allocated significance of effect upon each receptor is provided.
- 13.2.31 The criteria used to inform judgements on the significance of the assessed landscape effects are described in **Table 13-6**. It should be noted that the significance categories can be either beneficial or adverse. Whilst the majority of potential effects are anticipated to be negative, in some circumstances the addition of new features may be beneficial.

Table 13-6: Significance of landscape effect

Level of Effect	Criteria
Substantial	The Proposed Scheme would be at considerable variance with the character (including quality and 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 effect. The project would enhance the character (including quality and 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 effect.
Moderate	The Proposed Scheme would conflict with the character (including quality and value) and/ or special qualities of the landscape receptor, have an adverse effect on characteristic features or elements or diminish a sense of place, resulting in an adverse effect. 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 effect.
Slight	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 effect. 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 effect.
Negligible/ 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.

- 13.2.32 It is customary that any effect that is identified as Moderate or Substantial is deemed to be significant and will require detailed investigation of potential mitigation in order to reduce the effect, wherever possible.
- 13.2.33 In the event of an effect resulting in a Moderate/ Slight effect, whereby Moderate is considered significant and Slight is considered not significant, professional judgement has been used to

consider and explain if that particular effect was considered to be significant or not significant, based upon the context of that individual receptor. This has been explained where this occurred within the assessment.

Assigning mitigation

- 13.2.34 Mitigation measures required to reduce the identified landscape effects are presented in **section 13.5**.

Limitations to Assessment

- 13.2.35 Precise details of construction activities in specific locations are limited. An indicative assessment of construction stage effects was made for the landscape resource.

13.3 Baseline Conditions

Landscape Designations

13.3.1 Designated landscape areas are shown on **Drawing 13.2** in **Volume 3**. The only landscape designation is the Cairngorms National Park (CNP).

13.3.2 The study area also includes SNH areas of Wild Land. These are not statutory designations; however, they are considered in this assessment in relation to wildness.

Cairngorms National Park (CNP)

13.3.3 The Proposed Scheme extent lies within the CNP, established in 2003. This is the highest level of landscape designation in the UK.

13.3.4 The ‘special landscape qualities’ (SLQ) of the CNP form part of its designation and these are set out in full in ‘*The special landscape qualities of the Cairngorms National Park*’ (SNH Commissioned Report, No. 375. SNH and CNPA (2010)). The special landscape qualities are summarised as:

General Qualities

- Magnificent mountains towering over moorland, forest and strath
- Vastness of space, scale and height
- Strong juxtaposition of contrasting landscapes
- A landscape of layers, from inhabited strath to remote, uninhabited upland
- ‘The harmony of complicated curves’
- Landscapes both cultural and natural

Trees, Woods and Forests

- Dark and venerable pine forest
- Light and airy birch woods
- Parkland and policy woodlands
- Long association with forestry

Moorlands

- Extensive moorland, linking the farmland, woodland and the high tops
- A patchwork of muirburn

The Mountains and Plateaux

- The unifying presence of the central mountains
- An imposing massif of strong dramatic character
- The unique plateaux of vast scale, distinctive landforms and exposed, boulder strewn high ground
- The surrounding hills
- The drama of deep corries
- Exceptional glacial landforms
- Snowscapes

Wildlife and Nature

- Dominance of natural landforms
- Extensive tracts of natural vegetation
- Association with iconic animals
- Wild land
- Wildness

Glens and Straths

- Steep glens and high passes
- Broad, farmed straths
- Renowned rivers
- Beautiful lochs

Visual and Sensory Qualities

- Layers of receding ridge lines
- Grand panoramas and framed views
- A landscape of many colours
- Dark skies
- Attractive and contrasting textures
- The dominance of natural sounds

Culture and History

- Distinctive planned towns
- Vernacular stone buildings
- Dramatic, historical routes
- The wistfulness of abandoned settlements
- Focal cultural landmarks of castles, distilleries and bridges
- The Royal connection

Recreation

- A landscape of opportunities
- Spirituality

13.3.5 As the Proposed Scheme is restricted to the existing A9 corridor, it will have limited effects on these qualities; however, each has been considered to ensure that the landscape effects of the Proposed Scheme are fully understood within the context of the special qualities of the CNP.

Note on Assessment of CNP SLQs

- 13.3.6 Later assessment of the Landscape Character Areas (LCAs) and Local Landscape Character Areas (LLCAs), with their unique landscape features and key characteristics, has been undertaken and cross referenced within the assessment of the CNP SLQ's. The key features and characteristics which link SLQ's, LCA's, and LLCA's were assigned sensitivity ratings and considered as inter-related across the impact assessment.
- 13.3.7 The landscape objectives for the Proposed Scheme and subsequent Environmental Mitigation Strategy were developed mindful of the key features and characteristics within the SLQ's, LCA's, and LLCA's. The new landscape framework (features/ elements) were then assessed through to residual impacts to consider any longer term changes to the landscape character; therefore a further detailed assessment against the SLQs was not undertaken. The CNP SLQ assessment is detailed in **Appendix 13.4** in **Volume 2**.

Landscape Character Areas (LCAs)

- 13.3.8 The 'A9 Dualling Programme, SEA, Environmental Report Addendum, Appendix F, Strategic Landscape Review Report' (Transport Scotland, 2014) (hereafter called the 'Strategic Landscape Review Report') reviews existing published landscape character assessments associated with areas in proximity to the A9 route; the assessment studies of relevance to the Project 8 extent are listed in **paragraph 13.2.11** above.
- 13.3.9 This 'Strategic Landscape Review Report' states: "The Cairngorms National Park Authority Assessment has been prioritised and used as the predominant assessment over the Turnbull Jeffery study due to its finer grain and the fact that it is more recent".
- 13.3.10 LCA definitions and descriptions for this chapter have therefore been taken from the 'Cairngorms National Park Landscape Character Assessment' (CNPA, 2009). The LCAs within the CNP that are relevant to the Project 8 extent are shown on **Drawing 13.3** in **Volume 3**. They are also listed here and described in detail below:
- Drumochter Pass
 - Glen Truim: Upper Glen and Dalwhinnie
 - Glen Truim

Drumochter Pass LCA Description

- 13.3.11 The Drumochter Pass itself is located to the south of Project 8; however, as shown on **Drawing 13.3** in **Volume 3**, this LCA boundary encompasses the southern part of Project 8, up to approximate chainage (ch.) 21,100. The Drumochter Pass is a dramatic and sublime area. Steep, at times verging on sheer, side slopes contain this narrow, elevated pass which links Speyside to the Perthshire glens. There are extensive debris slopes pockmarked with active run-off chutes and landslips while smaller water channels often simply drop down the hillsides in shallow gullies.
- 13.3.12 Settlement is extremely sparse, with occasional buildings and infrastructure associated with managing shooting estates and the Highland Main Line railway (HML railway), located on alluvial fans where tributaries join the main river system. The rivers and their tributaries meander across the glen floor, sometimes fragmenting into a network of smaller drainage channels and wetlands.
- 13.3.13 The lower slopes and the edge of the glen floor are often covered in extensive glacial-fluvial deposits which are very prominent when viewed in low-angled sunlight or after snowfall. This is

classic hummocky moraine, where individual ridges mark standstills in the glacial retreat. Heather moorland covers the sides of the pass, and unimproved grassland along the glen floor, creates a simple vegetation pattern, which in detail reflects the small-scale topography, with heather on drier hummocks.

- 13.3.14 Within the Project 8 extents of the Drumochter Pass LCA there is an existing linear functional coniferous tree belt to the east of the A9. Within this landscape, it appears as an obvious planted feature, as it has been planted to prevent snow drift onto the road. It is largely one species of coniferous stock that is generally of the same age.
- 13.3.15 The A9, the HML railway, National Cycle Network Route 7 (NCN7) and the Beauly to Denny Power Line (BDL) are confined into the narrow pass. This infrastructure along with other features, such as road signs and the telecommunications mast at Drumochter, are very visible in this sparse landscape.
- 13.3.16 The sense of drama related to travelling through such a pronounced pass is reinforced by the narrowness of the glen and the precipitous side slopes, as well as the shadows cast by the steep flanks of the pass. A change in weather is often experienced when crossing through Drumochter Pass, which can alter the perception of the landscape.



Photograph 13-1: Image of Drumochter Pass LCA

Route Specific Character Issues

- 13.3.17 Travelling through the Drumochter Pass is a dramatic landscape experience. There is wild open moorland on both sides of the road and a real sense of exposure. The vegetation near the road is heather/ acid grassland. There is currently little tree cover other than the functional coniferous tree belt.
- 13.3.18 The Drumochter Pass is very self-contained but, as its character contrasts strongly with Perthshire to the south and Speyside to the north, the sequence of travelling between different landscape characters heightens the sense of drama.
- 13.3.19 This pass has a pronounced 'upland' character. Sparsely and simply vegetated, wetland and low heath reveal the topography and the active scree slopes and land slips. Its simplicity is starkly contrasted to the infrastructure contained within, but the sense of travelling through an area where natural forces can dominate over human intervention prevails.

A9 Dualling Programme Strategic Landscape Review Guidance

13.3.20 The ‘Strategic Landscape Review Report’ set out guidance for each LCA. For the Drumochter Pass LCA these are:

“Minimise the infrastructure associated with the road. Due to the landscape being very open any additional infrastructure would be very evident. Roadside tree planting is unlikely to be appropriate and the palette of materials used for the new road should be very restricted to match the simplicity of the surroundings.

The relationship of the road alignment to the adjoining landform will be very important as the form of the earthworks will not soften over time and vegetation will take many years to establish.

The railway and cycle way are close to the road, have clear views of it and visual impacts of the dualling could be hard to mitigate.”

Strategic Landscape Review – Key landscape objectives

13.3.21 As part of the ‘Strategic Landscape Review Report’, key landscape objectives were also set for each LCA. For the Drumochter Pass LCA these are:

- *“Ensure any new alignment fits with the dramatic local landscape form*
- *The minimising of infrastructure here should be a key design objective and must form a key aspect of the design approach for all disciplines*
- *Integrate any new tree planting with the existing tree belts, the modification and enhancement of the existing tree belts with broadleaf planting should be considered*
- *The enjoyment of the spectacular views here should be facilitated”*

Sensitivity

13.3.22 As the Drumochter Pass LCA is mostly within the CNP, the landscape is clearly highly valued. It is close to the western CNP boundary and is peripheral to the core Cairngorms. Drumochter Pass is widely renowned as a distinctive place with a dramatic and wild character. With regards to its susceptibility, the Proposed Scheme is placed within the existing infrastructure corridor, which includes the HML railway, the existing A9, NCN7 and the BDL.

13.3.23 The Proposed Scheme extents are in the northernmost part of the LCA, away from the most dramatic parts of the pass itself. These factors limit the potential effects on the essential character of the area, and reduce the LCAs susceptibility to this change.

13.3.24 Therefore, this LCA is allocated a **High** value and a **Medium/ low** susceptibility due to the confined characteristics of this LCA in this location and existing infrastructure influencing the character of this baseline. Therefore, this LCA has assigned an overall **Medium** sensitivity to the Proposed Scheme.

Glen Truim Upper Glen and Dalwhinnie LCA Description

13.3.25 Within this LCA there is a wide floodplain contained by the shallow side slopes of Cathar Mor to the west and elongated rounded hills to the east. It is sparsely vegetated, with little woodland; only scrubby willow and occasional broadleaf trees associated with the watercourses, as well as

larger blocks of conifers. The glen floor is dominated by grassland and wet heath, in parts fenced into large fields.

- 13.3.26 The existing A9, the HML and General Wade’s Military Road (GWMR) are all elevated above the strath floor and are aligned predominantly north-south along the glen. The glen feels expansive, exposed and open. This is further emphasised by the sparse tall vegetation (lack of trees and tall shrubs) and lack of cultivated land, as well as the shallow gradients of the side slopes to the existing A9, especially to the west.
- 13.3.27 There is little existing settlement except the small village of Dalwhinnie, which includes the prominent white painted Dalwhinnie Distillery. The River Truim is fed by drains and tributaries as it meanders across the flat floor of the strath. The valley is prone to flooding and has braided reaches. Occasional gravelly glacial-fluvial deposits and terraces at the edges of the glen floor stand out as features.



Photograph 13-2: Image of Glen Truim Upper Glen and Dalwhinnie LCA

Route Specific Character Issues

- 13.3.28 The road landscape is very open and there is limited tree cover in the vicinity. The landform creates a series of sweeping curves. The slightly elevated road allows open views across the strath. The low rolling Monadhliath summits to the north and west enclose and define the wider landscape.
- 13.3.29 The openness also ensures that traffic and infrastructure is clearly visible. The sense of elevation, and the relative dominance of natural processes such as flooding, is pronounced, despite the presence of infrastructure and the settlement at Dalwhinnie. The simplicity of the topography is complemented by the irregular patterning in the vegetation cover.

A9 Dualling Programme – Strategic Landscape Review Guidance

- 13.3.30 The ‘Strategic Landscape Review Report’ set out guidance for this LCA. For the Glen Truim: Upper Glen and Dalwhinnie LCA these are:
- *“Retain the exposure of the road and the open landscape with limited vegetation*
 - *Road alignment should reflect and respect the local landform*
 - *The relationship of the railway with the road should be carefully managed to minimise inter-visibility”*

Strategic Landscape Review – Key landscape objectives

13.3.31 As part of the ‘*Strategic Landscape Review Report*’, key landscape objectives were also set for each LCA. For the Glen Truim: Upper Glen and Dalwhinnie LCA these are:

- *“Ensure any new alignment fits with the dramatic local landscape form*
- *Reinforce the existing open character*
- *The minimising of infrastructure here should be a key design objective and must form a key aspect of the design approach for all disciplines*
- *The enjoyment of the spectacular views of the distillery and the views towards the Drumochter hills from the north should be facilitated”*

Sensitivity

13.3.32 As the Glen Truim Upper Glen and Dalwhinnie LCA is almost entirely within the CNP, the landscape is clearly highly valued.

13.3.33 The dualling will take place within the existing infrastructure corridor which includes the existing A9, NCN7, HML railway and the BDL for the southern half of the LCA.

13.3.34 Due to the local climate, re-establishment of vegetation will take considerable time. This LCA is allocated a **High** value and **Medium/ low** susceptibility, resulting in a **Medium** sensitivity.

Glen Truim LCA Description

13.3.35 A sequence of low, rocky hill summits contain this glacial valley to the west of the A9, while to the east of the A9, summits have been sculpted by glaciers into more rounded forms. This glen sits just south of the confluence of the Rivers Spey and Truim. The River Truim winds across the narrow glen floor between gravelly terraces, dropping over a bench of rock relatively resistant to erosion at the dramatic Falls of Truim.



Photograph 13-3: Image of Glen Truim LCA

13.3.36 Planted woodland, including commercial conifer, occasional older belts of trees and recently established native woodland, is supplemented by extensive regeneration of broadleaf woodland

and conifers along the steep slopes and the roadsides, where grazing is limited. Heather moorland extends over more open slopes.

- 13.3.37 Further north within this LCA there are blocks of broadleaf woodland surrounding Crubenmore, the Falls of Truim and Etteridge, which is outside of Project 8, however woodland here connects with the woodland surrounding Crubenmore that is within Project 8.
- 13.3.38 The A9 and the HML railway sit elevated, side by side, hugging the eastern edge of the glen floor. From the A9, the glen appears to be well wooded but, from more minor roads and footpaths, the glen is experienced by people as an intimate scaled pattern of woodland and open ground, which reflects the small scale diversity of the landform.

Route Specific Character Issues

- 13.3.39 The A9 is mostly enclosed by pine and birch trees in this LCA, with some views out to the hills, including Cruben Mhor and Cruben Beag. The Glen Truim LCA sees a narrowing of the road corridor and is the transition between Strathspey and the wild moorland of Dalwhinnie and Drumochter.
- 13.3.40 This landscape is diverse, with a range of different topographical features complemented by varied woodland and a pattern of fields. There is extensive natural regeneration of trees and scrub, coupled with new planting, which reinforces the sense of an enclosed 'pass' when travelling through this glen.
- 13.3.41 There is a sense of travelling through an enclosed linear space as this narrow glen links the fertile, diverse 'Speyside' with the open and exposed character of Dalwhinnie and the Drumochter Pass to the south. The glen is largely self-contained, with little inter-visibility with other areas; it therefore forms a distinct 'threshold' between the character areas of Speyside to the north, and the elevated, sparse landscapes of upper Glen Truim and Drumochter to the south.

A9 Dualling Programme – Strategic Landscape Review Guidance

- 13.3.42 The 'Strategic Landscape Review Report' set out guidance for this LCA. For the Glen Truim LCA this is:

“Reinforce the sense of enclosure next to the road. Retain an intimate scaled pattern of woodland and open ground.”

Strategic Landscape Review – Key landscape objectives

- 13.3.43 As part of the 'Strategic Landscape Review Report', key landscape objectives were also set for each LCA. For the Glen Truim LCA these are:
- *“Utilise the limited palette of existing trees near the road to reinforce the sense of enclosure*
 - *Investigate opportunities to improve access to Falls of Truim*
 - *Retain mixed woodland character*
 - *Reinforce pinch-point character with planting where possible*
 - *Views of the hillsides of Cruben Mhor and Cruben Beag are a key feature of this LCA and should be retained and enhanced”*

Sensitivity

- 13.3.44 As the Glen Truim LCA is entirely within the CNP, the landscape is highly valued. With regard to susceptibility, the dualling of the A9 will take place within the existing infrastructure corridor which includes the HML railway, the existing A9 and NCN7. The scale of the Proposed Scheme is very small compared to the scale of the landscape.
- 13.3.45 The existing infrastructure corridor is well wooded and much of the effect of the Proposed Scheme will be screened
- 13.3.46 This LCA is allocated a **High** value and **Low** susceptibility resulting in a **Medium** sensitivity.

Local Landscape Character Areas (LLCAs)

- 13.3.47 To enable assessment of the landscape effects for the EIA, at a local level, a series of Local Landscape Character Areas (LLCAs) were identified that were specific to the Proposed Scheme, and which allow a more detailed understanding of the baseline landscape. Eight LLCAs are of relevance to this assessment and are detailed below.
- 13.3.48 Each LLCA has a distinct character, and they have been defined through desk study and site inspection. In contrast to the LCAs, they are specifically related to the A9 and the experience of travelling along the road corridor.
- 13.3.49 The LLCAs are shown on **Drawing 13.4 in Volume 3**. Each LLCA has a distinct character, and they were defined through desk study and site inspection. Key characteristics of each LLCA are described below. The methodology for the production of the LLCAs and field data sheets produced through site visits are detailed in **Appendix 13.2 in Volume 2**.

Dail A'Chuirn (tie in and ch. 20,000 – 20,900)

- 13.3.50 Dail A'Chuirn lies at the uppermost section of Glen Truim strath. The majority of the LLCA is to the south of Project 8; however, its northern-most section is within Project 8, up to approximate ch. 20,900. Within this part of Project 8, there is an open U-shaped strath formed by the River Truim and the mountains to the west. There are a number of mountains to the west, with those of relevance to Project 8 being Creagan Mor (772m above ordnance datum (AOD)) and the rolling ridge of Meall a'Bhuirich (710 AOD). To the east of the A9, landform undulates and rises slightly. Very near to the A9 there is a functional coniferous tree belt, which frames views to the north and west. The pylons and lines of the BDL stand tall behind the coniferous tree belt to the east, running parallel to the A9. There are open expanses of heather on the slopes that stretch west towards Meall a'Bhuirich and areas of rough grassland in the strath. The River Truim meanders through the landscape alongside the HML railway to the west. Telegraph poles run adjacent to the HML railway.
- 13.3.51 This LLCA is of **High** value. With regards to susceptibility, the dualling of the A9 will take place within the existing infrastructure corridor which includes the HML railway and the existing A9, along with NCN7. Therefore, a **Medium** susceptibility resulting in a **Medium** sensitivity.

Route specific aesthetic/ perceptual aspects

- Large scale, open/ exposed diverse mixed texture of rounded massive hills with rough pastures and moorland
- Extensive rolling topography with muted colours but a different localised character near Balsporran and the A9 corridor

- The A9 forms a regular pattern with fragmented areas of tree plantations around Drumochter Lodge.
- The A9 and HML railway combined with the wild scenery contribute to an interesting and contrasting landscape
- The mix of human and natural elements is attractive; there are a number of visual features that are widely dispersed; there is a pattern of rough grazing pasture adjacent to the floodplain divided by wire fences
- Enclosure of mature coniferous woodland belts adjoining rough grassland and moorland; informal patterning amongst the woodland and buildings; open and exposed towards the east and west of the A9

Tom a’Bhacain (ch. 20,900 – 22,200)

13.3.52 This LLCA on the southern approach to Dalwhinnie is surrounded by rolling hills and has the feeling of an enclosed landscape. Plantation forest to the east of Tom a’Bhacain and plantation strips of the functional coniferous tree belt contribute to the feeling of enclosure and also give the impression of a well wooded character. At the northern end views open out towards Dalwhinnie with long distance views of the village and views of Monadhliath becoming more apparent. To the west of the A9 there are smaller rolling hills with patchwork vegetation and clumps of woodland across the strath floor. Built infrastructure dominates the foreground of Tom a’Bhacain which includes the A889 junction to Dalwhinnie as well as snow gates, bus stops and the continuation of the BDL to the east of the A9.

13.3.53 This LLCA is of High value. With regards to susceptibility, the dualling of the A9 will take place within the existing infrastructure corridor which includes the HML railway and the existing A9, along with NCN7. This LLCA contains slightly more infrastructure than Dail A’Chuirn as the existing Dalwhinnie Junction is present here. Therefore, a **Medium/ low** susceptibility is allocated, resulting in a **Medium** sensitivity.

Route specific aesthetic/perceptual aspects

- Tree belt to the east of the A9 screens views in this direction and gives a sense of enclosure
- Coniferous plantation on the western hillsides forms the backdrop of views and adds to the enclosed local character, with the River Truim meandering adjacent to the A9 across the strath floor
- Blocks of vegetation are scattered across the strath and Dalwhinnie can be seen beyond this to the north-west
- Strong presence of infrastructure surrounding the road corridor, including snow gates, BDL and bus stops
- Impressive views north of the Monadhliath

Dalwhinnie (ch.20,200 – 24,000)

13.3.54 Within the Dalwhinnie LLCA, there are three further levels of definition within the LLCA that can be assigned; Southern Dalwhinnie, Central Dalwhinnie and Northern Dalwhinnie. These three areas have slightly different qualities, as described below.

- 13.3.55 Southern Dalwhinnie is a transitional zone to/ from Central Dalwhinnie. There is a strong connection to the A9 corridor within this area and there are a number of signs along the road to signal the existing Dalwhinnie Junction, as well as bus stops on the A9. At this location, the A9 is slightly more elevated which widens views over Dalwhinnie and the distillery. The woodland backdrop to the west of Dalwhinnie frames long distance views of the mountains visible to the north. This generally open landscape is occasionally punctuated with small clusters of trees and shrubs, with the SSE Aqueduct and the BDL, which are both apparent to east of the A9.
- 13.3.56 The general character of Central Dalwhinnie is a built environment surrounded by open moorland with scattered clumps of trees near the road and distant coniferous woodland creating a backdrop to the west. Hills to the east, with gentle rolling expanses of heather slopes, contrast with the magnificent view north of the Monadhliaths and the glimpsed views of Loch Ericht to the south-west. Timber post pylon lines and lattice transmission towers and cables to the east form distinctive landscape features.
- 13.3.57 There is a generally open character in Northern Dalwhinnie with occasional clumps of trees near the road. Dalwhinnie Distillery is located within Northern Dalwhinnie. There are picturesque views towards the very attractive setting of the distillery as well as spectacular views north of the Monadhliaths. The BDL is very apparent to the east of this area and slightly detracts from the high quality nature of the surrounding views. Where the A9 crosses the SSE Aqueduct, there is a large bridge structure, which is visible from Dalwhinnie Distillery and the A889.
- 13.3.58 This LLCA is of **High** value. It is allocated a **High/ medium** susceptibility, as the landscape is very open and therefore tolerance to change will be low. This will result in a **High/ medium** sensitivity as the landscape will have limited capacity to accommodate change.

Route specific aesthetic/perceptual aspects

- Presence of infrastructure continues and the BDL is apparent to the east
- Generally open landscape with long distance views toward Dalwhinnie Distillery to the north of Dalwhinnie
- Hillslopes with coniferous plantation is still visible beyond Dalwhinnie, where glimpse views towards Loch Ericht are possible
- Scattered vegetation on the eastern road boundary contrasts to the muted slopes bounding the A9 to the west

Leacainn (ch. 24,000 – 25,000)

- 13.3.59 This area of open moor is distinctively bare, with little to no trees in the immediate vicinity. The Truim strath is relatively featureless and surrounded only by gently undulating heather moorland and patchwork vegetation across the rolling hills to the east. The only significant landscape features seem to be man-made, with the HML railway visible from the embankment and the BDL standing out across the strath, adding a dramatic built infrastructure element to the landscape.
- 13.3.60 This LLCA is of **High** value. This LLCA is allocated a **Low/ medium** susceptibility as this LLCA will be able to accommodate online widening of the existing A9 with minor consequence, therefore resulting in a **Medium** sensitivity as the LLCA will be able to tolerate a reasonable level of change.

Route specific aesthetic/perceptual aspects

- Occasional scattered trees stand out in this characteristically open landscape of gently undulating moorland

- The strath is open and featureless through this stretch with muted colours
- Key landscape features are man-made, the BDL is highly visible and crosses over the A9 though this LLCA, other infrastructure such as the HML railway is also present

Cuaich (ch. 25,300 – 26,700)

13.3.61 The hamlet at Cuaich contains a small cluster of five estate properties as well as two agricultural buildings, which are located close to the A9. There are scattered clusters of mature trees, including Lechden Woods, and a patchwork of vegetation making up the foreground of the long views east of rolling hills beyond Loch Cuaich. Lechden Woods is a recognisable block of coniferous woodland planting to the west of the A9. Much of this woodland has been affected by wind throw. The crossing at Allt Cuaich is a significant feature of the landscape as is the GWMR which is slightly elevated within the landscape. The topography rises immediately east of the A9 into hills, contrasting the flat open character to the west of the A9.

13.3.62 This LLCA is of **High** value. This LLCA is allocated a **High/ medium** susceptibility therefore resulting in a **High/ medium** sensitivity as this LLCA will be reasonably tolerant to change but there are distinctive elements to this area that would have limited tolerance to change.

Route specific aesthetic/perceptual aspects

- Generally open landscape, the settlement of Cuaich is visible to the east, with the buildings standing out in this otherwise open landscape
- Significant vegetation at Lechden Woods and around the settlement stand out
- To the east the Allt Cuaich forms a flat open valley between Leacainn and Creag Ruadh, with the rolling hills beyond
- Flat open expanse of the strath to the west, with long distance views of the hills beyond

Dallanach (ch. 26,700 – 29,400)

13.3.63 Topography and landform play a huge part in defining this character area. To the southern section of this LLCA there is a sense of enclosure surrounding the A9 as landform forms rocky outcrops to the east and west. There is also a wider feeling of being enclosed by the hill/ Graham of Creag Ruadh to the east and the lower slopes of Meall Ruigh nam Biorag hill to the west, with narrowing views north towards the pass. Further to the north within this LLCA there is a very open strath landscape to the east. Landform rises to the east of the A9. In terms of built form, the HML railway to the west is a key feature, as is the GWMR which sits in a slightly elevated position in the landscape to the west.

13.3.64 This LLCA is of **High** value. This LLCA is allocated a **High/ medium** susceptibility therefore resulting in a **High/ medium** sensitivity as this LLCA will be reasonably tolerant to change but there are distinctive elements to this area that would have limited tolerance to change.

Route specific aesthetic/perceptual aspects

- Varied landscape with undulating topography defining the sense of enclosure along the road corridor
- Scattered trees and sparse vegetation cover provides open views west, hillslopes to the east with rocky outcrops add a sense of enclosure
- The HML railway is a key feature to the west of the road

Odharaich (ch. 29,400 – 30,000)

- 13.3.65 This LLCA has a strong feeling of enclosure, with the A9 cutting through the landscape and dramatic areas of exposed rock protruding from the east. Stretches of predominantly coniferous woodland line either side of the road complementing the expanses of rock formations. The area acts as a transition zone so there are limited effects from elements of the built environment; however, the HML railway is a feature to the west of the A9, with GWMR being an elevated feature further to the west.
- 13.3.66 This LLCA is of **High** value. This LLCA is allocated a **Low/ medium** susceptibility therefore resulting in a **Medium** sensitivity as this LLCA will likely be able to tolerate a reasonable amount of change.

Route specific aesthetic/perceptual aspects

- A9 in cutting with vegetated slopes create sense of enclosure
- Rolling hillsides create a dramatic landscape to the west, with long views across the strath in the transition zone to an enclosed character

Crubenmore (ch. 30,000 – 31,000)

- 13.3.67 This LLCA becomes slightly more enclosed than others within Project 8. There is more of a wooded context to the east and west of the A9, with further woodland areas to the north-west forming a backdrop. Topography rises to the west of the A9 and falls to the east. Tree planting surrounds the road corridor, predominantly to the west. Cruban Beag to the north west of this location and Meall Odharaich to the south east form the backdrop to this LLCA. The River Truim and the GWMR are key features to the west of the A9, with the river creating a valley feature here and the GWMR being elevated in the landscape.
- 13.3.68 This LLCA is of **High** value. Due to the above, this LLCA is allocated a **Medium** susceptibility therefore resulting in a **Medium** sensitivity.

Route specific aesthetic/perceptual aspects

- Coniferous vegetation to the east and west at the most northern end of the project giving a feel of enclosure, narrow views north and south are possible
- Areas of rock cut on the southbound side of the A9 with occasional cascades, adding to the dramatic character in this area

Landscape Character Value, Susceptibility and Sensitivity Summary

A summary of the landscape value, susceptibility to change and overall sensitivity of each LCA and LLCA around the Proposed Scheme extents is provided in **Table 13-7** below.

Table 13-7: Summary of LCAs and LLCA Value, Susceptibility and Sensitivity

Area	Value	Susceptibility	Sensitivity
Landscape Character Area			
Drumochter Pass LCA	High	Medium/ low	Medium
Glen Truim Upper Glen and Dalwhinnie LCA	High	Medium/ low	Medium
Glen Truim LCA	High	Low	Medium

Area	Value	Susceptibility	Sensitivity
Local Landscape Character Area			
Dail A'Chuirn	High	Medium	Medium
Tom a'Bhacain	High	Medium/ low	Medium
Dalwhinnie	High	High/ medium	High/ medium
Leacainn	High	Low/ medium	Medium
Cuaich	High	High/ medium	High/ medium
Dallanach	High	High/ medium	High/ medium
Odharaich	High	Low/ medium	Medium
Crubenmore	High	Medium	Medium

Landscape Features and Perception

General

- 13.3.69 In accordance with the Evaluation Approach in **section 13.2**, assessment of susceptibility to change of elements of the landscape resource, is taken to mean its individual characteristics/ features. This section provides a high-level, project wide assessment of discrete landscape characteristics that inform the LCA and LLCA evaluations. These are assessed as separate items to evaluate the components that together form the landscape of the study area and how the Proposed Scheme interacts with them individually. They have provided a basis for assessing the landscape objectives of the Proposed Scheme, and assessment of the sensitivity of each characteristic provides a means of indicating the degree to which those objectives are met by the design.

Landform

- 13.3.70 **Drawing 13.5** in **Volume 3** presents the topography of the study area. The dramatic Drumochter Pass, with its steep side slopes enclosing the elevated pass, opens out to the north to a wide flood plain where the Proposed Scheme begins. This is bounded by rounded hills and the Monadhliath range to the north, which creates the distant horizon.
- 13.3.71 The flood plain narrows at Crubenmore to create another, albeit less dramatic, pass. The A9 is adjacent to the east side of Glen Truim just above the flood plain. The landscape here is of **High** value and landform is a key part of the character. The vast scale of the visible landform means that susceptibility to changes of the project scale proposed is **Medium**; an overall allocation of **High** sensitivity is appropriate. As reflected in the LCA and LLCA descriptions, the landscape is very open along the majority of the A9 within Project 8, with limited tree cover; therefore, landform is a sensitive feature.

Vegetation

- 13.3.72 Whilst it appears wild, the existing vegetation cover within the study area and the surrounding landscape has generally been created by human action through land use and livestock management in conjunction with the natural influences of local geology, landform, microclimate, drainage and soils.
- 13.3.73 The regular practice of burning heather (muirburn) is a key aspect in determining the appearance of the moorland. The predominant type of vegetation cover comprises heather moor and acid grassland. Generally, the slopes are rolling heather moorland and the glen floor is poorly drained grassland.
- 13.3.74 There are some extensive commercial conifer plantations between the tie in and ch. 20,000 to 21,900 to the east of the A9 and at Lechden Woods between ch. 25,300 to 25,600 to the west of

the A9 as well as woodland to the west of Dalwhinnie on eastern facing hill slopes. There is little broadleaf woodland (other than at the north end of the Proposed Scheme), and small patches of scrubby willow.

- 13.3.75 The vegetation is of **High** value. It has a **Low** susceptibility to the changes proposed associated with the A9 dualling, therefore a **Medium** sensitivity has been allocated to this landscape feature.

Woodland

- 13.3.76 The southern end of the study area contains trees running parallel and to the east of the A9, planted as a functional coniferous tree belt. This is a narrow band circa 40m to 60m wide and was planted by Transport Scotland in the early 1980's to act as a winter resilience barrier to reduce the impact of drifting snow onto the A9. Within Project 8 this is between the tie in with Project 7 and ch. 21,900. There are also plantation woodlands to the west of Dalwhinnie.
- 13.3.77 There is also a block of woodland at Cuaich; Lechden Woods. This is a coniferous plantation and a lot of the trees have been affected by wind. This is located between ch. 25,300 to 25,600 to the west of the A9.
- 13.3.78 At the north end of Project 8, towards Crubenmore, the landscape becomes more wooded with plantation, including commercial conifer, occasional older belts of trees and recently established native woodland, which is supplemented by regeneration of broadleaf and conifer woodland along the steep slopes and the roadsides, where grazing is limited.
- 13.3.79 There is woodland associated with the infrastructure corridor through which the A9 passes. This woodland is susceptible to change. There are large tracts of coniferous plantation woodland within the wider landscape which are not highly valued.
- 13.3.80 Existing woodland is of **Medium** value but of **High** susceptibility to change. The rarity of native woodland in the landscape close to the A9 corridor gives it a **High** sensitivity.

Wildness

- 13.3.81 As identified within the CNPA SLQs, Wild Land and Wildness are two separate landscape qualities.
- 13.3.82 **Drawing 13.2** in **Volume 3** shows the extent of SNH Wild Land for Scotland. Wild Land Areas are the most extensive areas of high wildness. They are identified as nationally important in Scottish Planning Policy, but are not a statutory designation.
- 13.3.83 There is an area of SNH Wild Land approximately 1km to the east of the existing A9. This Wild Land is considered to be not pertinent to this assessment as no direct effects are anticipated due to the distance from the proposed dualling to this area. Also, its characteristics are mainly concerned with remote, mountainous hill ranges that the A9 is on the very periphery of, so the character of the Wild Land will not be affected.
- 13.3.84 The general characteristics of the LCAs within the study area and the location within the CNPA and Highlands of Scotland are of a generally wild nature. This is identified as 'wildness' within the CNPA SLQs. The landscape that the A9 Proposed Scheme is located within feels remote and relatively untouched by human endeavour, even though the land is actively managed.
- 13.3.85 The presence of coniferous forestry plantations, the BDL and transportation infrastructure does little to soften the apparently desolate atmosphere. Wildness within the study area of the Proposed Scheme is of **High** value. This quality is largely detached from the infrastructure corridor and therefore has a **Low** susceptibility to changes in the vicinity of the existing road. The fragile nature of wildness character gives it a **High/ medium** sensitivity as a landscape element.

Water

- 13.3.86 The form of the River Truim meandering northwards towards the River Spey is attractive and there are numerous burns and streams forming cascades and waterfalls which are small in scale, even when in spate. However, water features are not a key element of this landscape; water is a **Medium** value element within the landscape. The larger water bodies and rivers have a **Low** susceptibility as they are not affected by the changes proposed as part of the A9 dualling, but some of the burns close to the road may be affected. A **Medium/ low** sensitivity has been allocated to this landscape feature.

Historic and Cultural Associations and Built Environment

- 13.3.87 The landscape within the study area has a number of historic and cultural associations. Elements of relevance to this assessment are the following, however some of these are assessed in **Chapter 15**, as identified below:
- Wade’s Bridge, a Category B Listed Building (discussed in **Chapter 15**)
 - The area is sparsely populated, the largest settlement is Dalwhinnie which has population of around 100 (approximately 43 households)
 - The Dalwhinnie Distillery, founded in 1897, is a Category B Listed Building and is the key tourist destination within the study area (discussed in **Chapter 15**)
 - Crubenmore Bridges (Category B and C Listed) (discussed in **Chapter 15**)
 - In 1803, Samuel Taylor Coleridge described the area as “*a wild and desolate moorland*”; nothing fundamental has changed since (Effect on moorland is one of the Historic Landscape Characters discussed in **Chapter 15**)
 - The corridor has long been an important north-south transport route, containing GWMR the HML railway, walking and cycling routes and the A9 itself (discussed in **Chapter 15**)
 - There are three Munro’s that are accessed from this stretch of the A9, as well as a network of hill paths
- 13.3.88 The main presence of buildings in the vicinity of the Proposed Scheme is within settlements at Dalwhinnie and Cuaich. Dalwhinnie Distillery is an important feature within the landscape/ townscape of Dalwhinnie and can be seen from the A9 road corridor. These and other features, including GWMR and the named summits of the Munros, are culturally and historically of **High/ medium** value and have a **Medium** susceptibility to change. Therefore, a **Medium** sensitivity has been allocated to this element.

Landscape Fit

- 13.3.89 The key factor in considering landscape fit is the relationship between the road geometry and the surrounding landform. The existing A9 generally has a good landscape fit throughout the study area as it responds to local topography and ties into the base of the hills that rise to the east. The existing A9 carriageway has a series of attractive sinuous curves following the eastern edge of the strath. Generally, the scale of the curves is entirely appropriate to the adjoining slopes and indeed the hills beyond.

Landscape Experience

- 13.3.90 The landscape experience is inevitably subjective, dependent on the individual. Dalwhinnie residents who may work on nearby estates will have a very different appreciation of the landscape from tourists driving through the Highlands for the first time.
- 13.3.91 The hills dominate and define the landscape, with minimal woodland cover. Roadside tree belts, a conifer plantation and birch/ pine woodland at Crubenmore contrast with the open heather moorland covering the extensive slopes.
- 13.3.92 The landscape is mostly experienced from the road, with vehicle travellers experiencing a sequence of “*layers of receding ridge lines*” and the “*harmony of complex curves*” which, are defining special landscape qualities of the CNP. Dalwhinnie Distillery stands out as a key feature in this relatively open landscape. Hill paths are often used by walkers accessing Munros. On these hill tracks the weather can greatly influence the landscape experience, with for example, snow and cloud adding to the sense of wildness.
- 13.3.93 The relationship between the road and the HML railway is important. For much of this area, the HML railway is across the strath from the A9 and forms part of the infrastructure corridor.
- 13.3.94 **Chapter 9** considers the effects of the Proposed Scheme on Non-Motorised Users (NMUs) and vehicle travellers.
- 13.3.95 The landscape experience in the study area is therefore perceived as a **High** value and, given that the relationship of the A9 to the landscape will not alter greatly despite the widening, it will be of **Medium** susceptibility to change, with an overall **High/ medium** sensitivity.

Landscape Features and Perceptual Sensitivity Summary

- 13.3.96 A summary of the value, susceptibility to change and overall sensitivity of each landscape feature, together with historic and cultural associations, landscape fit and landscape experience within the Proposed Scheme is provided in **Table 13-8** below.

Table 13-8: Summary of Landscape Features and Perception Sensitivity

Characteristic	Value	Susceptibility	Sensitivity
Landscape Feature			
Landform	High	Medium	High
Vegetation	High	Low	Medium
Woodland	Medium	High	High
Wildness	High	Low	High/ medium
Water	Medium	Low	Medium/ low
Landscape Perception			
Historic and Cultural Associations and Built Environment	High/ medium	Medium	Medium
Landscape Experience	High	Medium	High/ medium

Special Landscape Area (SLA)

SLA Overview

- 13.3.97 The ‘Ben Alder, Laggan and Glen Banchor’ Special Landscape Area (SLA) is an area that predominantly lies out with the A9 road corridor. However, there is an area within approximate ch. 28,750 to 31,050 where the A9 passes through this SLA. This area is shown on **Drawing 13.2** in **Volume 3**.
- 13.3.98 SLAs were identified by The Highland Council (THC) by virtue either as being large scale areas of regional importance for scenic quality, or as being small scale areas of local scenic and recreational value. THC will consider the potential effects of development proposals on the integrity of SLAs, including effects on their wider setting.
- 13.3.99 The information relating to the SLA is taken from the *Assessment of Highland Special Landscape Areas: The Highland Council in partnership with Scottish Natural Heritage* (Horner and MacLennan with Mike Wood, Landscape Architect (March 2010)).
- 13.3.100 This SLA, located at the heart of the Central Highlands, combines a series of attractive, predominantly wooded glens interspersed with small-scale farmlands, with rising moorland leading to distinctive craggy summits and mountain plateaux of picturesque quality. Traditional estate farmsteads, cottages, castles and gatehouses throughout the glens enrich the sense of history within the area. The area includes the rugged, southern part of Loch Ericht.

SLA – Key Landscape and Visual Characteristics

- 13.3.101 This complex and diverse area combines an intimate sequence of wooded glens, estate policies and lochs surrounded by rolling moorlands leading to mountains, craggy ridges and coires and mountain plateaux.
- 13.3.102 There is a strong contrast between the glens and the smooth rising heather moorland which leads to a series of prominent ridges, rugged coires, striking isolated mountain peaks and mountain plateaux.
- 13.3.103 Variable landform means that coniferous plantations generally merge well with the open hillsides above, and there is an almost seamless transition between woodland, forest, grassland and heath. Cascading waterfalls, small gorges, rocky outcrops and a scattering of birch trees further unites the moorland with valley floor and strath into a series of picturesque compositions.

SLA Special Qualities – Ever Changing Compositions

- 13.3.104 A contrasting combination of glens and mountains, with small scale rocky landforms in-between form a fairly chaotic composition with roads and reservoirs forming the main ordering elements. A dynamic sense of place is experienced through ever changing combinations of high mountain, craggy knolls and ridges, smooth moorland, dark coniferous forest and native broadleaf woodland, flat farmed strath and open loch.

SLA Special Qualities – Cultural Heritage that contributes to landscape character

- 13.3.105 Settlement is heavily concentrated around the banks of the River Spey and, to a lesser extent, the River Truim.

SLA Special Qualities – Sensitivity to change

- 13.3.106 Qualities that would be sensitive to change within this SLA and within Project 8 are mainly related to planting. Further woodland planting could reduce the variety of views and the quality of the travel experience, but it is also required to as part of the characteristics of this area.

SLA Special Qualities – Potential for landscape enhancement within Project 8

- 13.3.107 There is potential for the promotion of natural regeneration of native broadleaf woodland within the straths while ensuring that key views to historical buildings and features are retained or enhanced.

Baseline Summary

- 13.3.108 There are a variety of sensitive landscape features within the study area, as identified in this **section 13.43**. The landscape is large-scale and homogeneous, and hence the type of experience within it is imbued throughout the LCA. For the purpose of this EIA the following key elements were assessed:

- The three LCAs have a **Medium** sensitivity to the Proposed Scheme
- All LLCAs as listed above have a **High/ Medium** or **Medium** sensitivity to the Proposed Scheme
- A number of SLQs of the CNP are considered to be present within the LCAs, LLCAs and landscape features; these are specifically discussed within **Appendix 13.4** in **Volume 2**
- Of the seven landscape characteristics listed above in **Table 13-8**, two are **High** sensitivity (landform and woodland) two are **High/ Medium** sensitivity (wildness and landscape experience), two are of **Medium** sensitivity (vegetation and historic and cultural associations and built environment) and one is of **Medium/ Low** sensitivity (water)
- While existing vegetation may be of high value as habitat, it is less so in terms of landscape sensitivity; the non-native woodland on the other hand is considered to be high sensitivity, mostly due to its disproportionate importance in screening and integrating the large scale infrastructure of the A9 corridor into the landscape
- The landscape experience is of **High/ Medium** sensitivity because of the existing infrastructure of the A9 itself, the BDL and the HML railway

13.4 Potential Impacts

Introduction

- 13.4.2 This section considers the temporary (construction) and permanent (operational) potential landscape effects of the Proposed Scheme on the landscape character areas and features discussed in **section 13.1**.
- 13.4.3 All effects set out within this section are considered to be adverse, unless otherwise stated.
- 13.4.4 The long term permanent effects, after years 15-25, identified in this section are assessed to include embedded and additional mitigation. Additional mitigation is explained in **section 13.5**.

Embedded (Primary) Mitigation

- 13.4.5 Through the DMRB Stage 3 iterative design process, environmentally led workshops considered each aspect of the developing design and made recommendations for certain features to be included in the next design iteration. These aspects have been defined as ‘embedded mitigation’ and, where they are included in the Proposed Scheme design, they are considered within the context of the impact assessment as providing mitigation to avoid or reduce environmental impacts, and in some cases, provide environmental benefits. Detail of the embedded mitigation is further explained in **section 13.5**.
- 13.4.6 Within this EIA, ‘embedded’ mitigation is what GLVIA3 refers to as ‘primary’ mitigation. With respect to the landscape considerations in this chapter, the relevant aspects of embedded (primary) mitigation measures include:
- Preliminary form of cutting and embankment slopes (including any areas of rock cut) adjoining the mainline have been designed with the involvement of Landscape Architects to reflect local landform features where possible, within peat, habitat and flood zone constraints. There are several landform sensitive areas as set out within **paragraph 13.4.79** and the proposed slopes respond to these areas, to reflect the surrounding landform as much as possible. Through the design process, and as reflected within the Proposed Scheme, the desired gradients of all slopes adjoining the road have been set. Additional mitigation in the form of detailed design for some of these areas will be required to improve aesthetics and the landscape fit. This is set out within **Table 13-17**
 - Design of rock cutting between ch. 26,450 and 27,250
 - Initial slope design of Dalwhinnie Junction (ch. 22,000 – 23,000) and Cuaich (ch. 25,300 – 26,000)
 - Preliminary form of sustainable drainage system (SuDS) basins, have been designed in conjunction with Landscape Architects to reflect local landscape characteristics and to replicate natural features where possible
 - Location of A9 laybys in areas of visual interest at the following locations; northbound at ch. 23,850 and southbound at ch. 24,400 both from which views across to Dalwhinnie and Dalwhinnie Distillery are possible; northbound at ch. 26,300, from which views across the River Truim and to Dalwhinnie will also be possible; southbound at ch. 27,600 and northbound at ch. 30,200 where scenic views predominantly to the west will be possible. All laybys will have a segregation island, which will improve user safety.
 - Designs to improve aesthetics and local integration of structures, cascades and access tracks

- 13.4.7 While the impact assessment is undertaken in cognisance of the embedded (primary) mitigation features noted above, in order to ensure that all project mitigation requirements (including embedded (primary), specific and standard mitigation are captured, they have been included within the summary of mitigation in **section 13.5** of this chapter, and the Schedule of Environmental Commitments contained in **Chapter 21**. The additional mitigation listed in **section 13.5** is what GLVIA 3 refers to as secondary mitigation. Standard, embedded and project specific mitigation has been identified within **Table 13-17**.
- 13.4.8 The long term permanent effects after years 15-25 identified in this section have been assessed as including the embedded and additional mitigation. The details of the proposed additional mitigation measures are further explained in **section 13.5**.

Additional (Secondary) Mitigation

- 13.4.9 Additional landscape mitigation is that which is necessary to reduce or minimise any likely long term residual effects following the implementation of embedded (primary) landscape mitigation measures. In general, this would comprise the introduction of planting that screens adverse views from sensitive receptors; replaces element of views that have been removed by the Proposed Scheme; augments existing features; or enhances views by, for example, creating a context or frame. Additional mitigation measures are what GLVIA3 refers to as ‘secondary’ mitigation, and are further explained in **section 13.5**.
- 13.4.10 Additional mitigation, specific to views from the road, which is also assessed in **Chapter 9**, has been developed with input from Landscape Architects to align with the key landscape and visual design objectives for the Proposed Scheme (please refer to **Appendix 13.2** in **Volume 2**), including:
- Design of the roadscape environment including seeding and planted features (as shown on **Environmental Mitigation Drawings 6.1 to 6.11** in **Volume 3**)
 - Visual/ aesthetic treatment of concrete superstructure of retaining walls and some elements of bridges, subject to detailed design
 - New embankments and cuttings are to be designed at detail design to feather into the toe and top of the adjacent (existing) gradients at approved profiles to form slopes of natural appearance similar to the topography within the Proposed Scheme context
- 13.4.11 SuDS are to be further developed at detailed design stage including seeding and planted features (as shown on **Environmental Mitigation Drawings 6.12 to 6.14** in **Volume 3**)

Temporary Impact Assessment: Construction Phase

- 13.4.12 Although the effect of construction on landscape character and features will be limited, there are a number of likely construction activities that may affect the study area, including:
- Site clearance and demolition
 - Stock proof fencing
 - Pre-earthworks drainage and temporary SuDS
 - Earthworks general (cut/ fill)
 - Material transfer via haul routes and temporary watercourse crossings
 - Rock cuts and rock breaking
 - Road sub-layer formation
 - Central reserve works
 - Road pavement laying
 - Structures demolition
 - Bridge abutment construction
 - Bridge structure and deck construction

- Stockpiling and temporary lay-down
- Watercourse diversions and culverts
- Drainage networks, including SuDS basin and outfall installation
- Earthworks rolling and compaction
- Vehicles moving machinery and materials to and from the site
- Machinery, potentially including heavy excavators, earth moving plant, concrete batching plant, cranes, etc.
- Vegetation loss and exposed bare earth over the extent of the proposed works
- Vegetation protection fencing to protect existing vegetation to be retained
- Road marking
- Signage installation
- Site restoration (ecological and landscape mitigation works)
- Active traffic management
- Temporary roads, access tracks, haul routes, etc.
- Temporary site compound areas including site accommodation and parking
- Temporary site compound areas, including accommodation and parking

13.4.13 Construction activities may result in a high local magnitude, but they will be temporary and of relatively limited duration.

Construction phase effects

13.4.14 Effects of temporary construction phase works that will be common for all of the landscape features may include: presence of vehicles and machinery, vegetation loss, exposed earth, construction of structures and earthworks, access roads, material storage and lighting.

13.4.15 Site compound areas, including site accommodation and parking, are not considered within this assessment as locations of these will be negotiated by the Contractor.

13.4.16 Construction stage effects will be temporary and of relatively limited duration (expected to be in the order of two to three years from preparatory site clearance works to completion). The overall landscape character is unlikely to be fundamentally changed by such short term effects; however, they will affect the landscape experience for their duration.

13.4.17 More significant temporary effects will likely arise in areas with extensive earthworks and where there are new structures in the Proposed Scheme, such as:

- Dalwhinnie Junction, including the link road to A889 and River Truim crossing
- SSE Aqueduct diversion and new aqueduct crossing at Dalwhinnie
- SuDS basins, maintenance tracks and crossing structure at Cuaich

Permanent Impact Assessment: Operational Phase

13.4.18 Mitigation to reduce impacts has been developed for the Proposed Scheme as part of the design development (embedded mitigation) and during the DMRB Stage 3 assessment (standard and specific additional mitigation).

13.4.19 The potential impacts of the dualling on the landscape were assessed in relation to the following aspects:

- Landscape designations - CNP SLQs
- LCAs

- LLCAs
- Landscape features
- The landscape experience

13.4.20 The consideration of temporary construction phase effects and then permanent operational phase effects are provided for each baseline receptor, assessed below within this section of the chapter.

Designated Landscapes – Cairngorms National Park

13.4.21 All of the study area lies within the CNP. Following discussions with CNPA, through the A9 Dualling Landscape Forum, it was agreed that the review of the SLQs should focus on the LCAs and LLCA’s that embody the specific special qualities. An assessment of the CNPA SLQs is presented in **Appendix 13.4** in **Volume 2**.

13.4.22 The potential effects of the Proposed Scheme on LLCAs are summarised in **Table 13-12** and **Table 13-13**.

13.4.23 The following special qualities which are seen as relevant to the study area are highlighted in **bold** below.

<p>General Qualities</p> <ul style="list-style-type: none"> • Magnificent mountains towering over moorland, forest and strath • Vastness of space, scale and height • Strong juxtaposition of contrasting landscapes • A landscape of layers, from inhabited strath to remote, uninhabited upland • ‘The harmony of complicated curves’ • Landscapes both cultural and natural 	<p>The Mountains and Plateaux</p> <ul style="list-style-type: none"> • The unifying presence of the central mountains • An imposing massif of strong dramatic character • The unique plateaux of vast scale, distinctive landforms and exposed, boulder strewn high ground • The surrounding hills • The drama of deep carries • Exceptional glacial landforms • Snowscapes 	<p>Visual and Sensory Qualities</p> <ul style="list-style-type: none"> • Layers of receding ridge lines • Grand panoramas and framed views • A landscape of many colours • Dark skies • Attractive and contrasting textures • The dominance of natural sounds
<p>Trees, Woods and Forests</p> <ul style="list-style-type: none"> • Dark and venerable pine forest • Light and airy birch woods • Parkland and policy woodlands • Long association with forestry 	<p>Wildlife and Nature</p> <ul style="list-style-type: none"> • Dominance of natural landforms • Extensive tracts of natural vegetation • Association with iconic animals • Wild land • Wildness 	<p>Culture and History</p> <ul style="list-style-type: none"> • Distinctive planned towns • Vernacular stone buildings • Dramatic, historical routes • The wistfulness of abandoned settlements • Focal cultural landmarks of castles, distilleries and bridges • The Royal connection
<p>Moorlands</p> <ul style="list-style-type: none"> • Extensive moorland, linking the farmland, woodland and the high tops • A patchwork of muirburn 	<p>Glens and Straths</p> <ul style="list-style-type: none"> • Steep glens and high passes • Broad, farmed straths • Renowned rivers • Beautiful lochs 	<p>Recreation</p> <ul style="list-style-type: none"> • A landscape of opportunities • Spirituality

13.4.24 As the Proposed Scheme is restricted to the existing infrastructure corridor, it will have limited effect on many of these qualities; however, each has been considered to ensure that the landscape effects of the proposed dualling are fully understood within the context of the CNP SLQs.

13.4.25 SLQs of the CNPA have been fully assessed against the Proposed Scheme within **Appendix 13.4** in **Volume 2**. Reference to relevant LCAs and LLCAs are made within this appendix.

- 13.4.26 The assessment finds that the Proposed Scheme will not result in any significant adverse effects on the CNP SLQs in the long term, as any anticipated effects are likely to be localised and limited in scale and nature. There is no risk of loss or damage to the SLQs identified. In regard to wildness, there may be limited disruption during construction, due to the works detracting from this sense of vast, wild, untouched landscape.

CNPA Landscape Character Areas (LCAs)

Drumochter Pass LCA

- 13.4.27 The scale of the landscape is vast, and the Proposed Scheme is small in comparison. All effects will be contained within the existing infrastructure corridor. The assessment below reviews the potential effects on the key features of this character area and how the Proposed Scheme will likely affect these.

Assessment of Key Characteristics

Table 13-9: Potential effects upon Drumochter Pass LCA key characteristics

Key Characteristics	Potential Effects
Dramatic and sublime character	Some slight reduction during construction but less on completion.
Hummocky moraines	None
Braided watercourses in valley floor	None
Little tree cover	Minimal
Heather and scree slopes	Minimal

Assessment against Key Objectives

- 13.4.28 The Proposed Scheme has been assessed against the landscape objectives established for this LCA via the A9 Dualling Programme Strategic Landscape Review. The assessment has informed the development of mitigation measures and consideration of residual effects; however, as it is not technically an assessment of potential landscape impacts, the assessment is provided as supporting information in **Appendix 13.3** in **Volume 2**.

Magnitude of effect

- 13.4.29 The works proposed as part of the Proposed Scheme only affect the most northerly section of the Drumochter Pass LCA to approximately ch. 21,200, which is further north from the pass itself. The key characteristics are less strongly represented within the study area. The area of Drumochter Pass LCA within the study area represents more of a transition zone between this LCA and the Glen Truim: Upper Glen and Dalwhinnie LCA. The magnitude of effects at construction, completion and over the long term is considered below.

Construction Stage

- 13.4.30 The construction within this LCA involves parallel widening to the east of the existing A9. There are no major structures or earthworks required. There will be local landform and land cover changes due to the construction works. Some tree planting will need to be removed to the east of the mainline of the Proposed Scheme.

- 13.4.31 The recent installation of the BDL, including its temporary haul road, has affected the landscape experience but has not altered the essential character of the landscape. A section of the former BDL haul road is included within the Proposed Scheme to provide alternative landowner access.
- 13.4.32 The existing infrastructure corridor is part of the landscape and could be said to emphasise the wildness of the vast landscape. The works will be restricted to a narrow band within this corridor; therefore, effects on the wider landscape will be limited despite the potentially high visibility of the works. A **Medium** magnitude of effect has been allocated within this LCA for the construction phase, as it is a relatively minor change in a limited area.

Operational Phase - on Completion (Year 1)

- 13.4.33 Upon completion of the construction, the completed earthworks and the relationship of the road within the wider landscape will be clearly evident. Large areas of bare earth will likely be visible; however, some initial seeding should green up and lessen impacts.
- 13.4.34 The character of the landscape is generally open; extensive woodland is not appropriate. Therefore, in terms of mitigation, large scale structural planting has not been proposed where there is not already woodland. Low level scrub planting and seeding is proposed on earthwork slopes and SuDS basins, whilst the existing tree belt will be supplemented with a mix of native broadleaf species.
- 13.4.35 Infrastructure has been kept to a minimum within the Proposed Scheme; however, there will be signs, barriers and fencing which could increase the roadscape presence within the area. These will, however, replace existing road furniture so the overall effect will be very limited. A **Medium** magnitude of effect has been allocated within this LCA for the operational phase on completion, as there will be a noticeable change albeit in a relatively narrow corridor.

Operational Phase – Long Term (Years 15-25)

- 13.4.36 The Proposed Scheme includes more variable, naturalistic slopes than standard engineered slopes. Within this LCA to the west of the A9 there will generally be no works to the slopes and they will remain as existing. Native planting will be required on these slopes to tie into the wider landscape features and to replace any lost coniferous tree belt planting. The overall landscape effect, compared to the existing road, will be very limited. A **Medium/ low** magnitude of effect has been allocated to this LCA for the long term operational phase, as vegetation becomes established it is likely that the magnitude of effect would reduce accordingly.

Significance of Effect at Construction and Operation

- 13.4.37 The landscape of Drumochter Pass is highly valued. The LCA has been allocated a **Medium** sensitivity due to its limited susceptibility to the road widening. The landscape is large scale and dramatic. The proposed changes are very small in comparison to the adjoining hills. All the works will be within the existing infrastructure corridor and so will have limited effect despite potentially generally wide visibility apart from where this is restricted to the east due to the existing coniferous tree belt.
- 13.4.38 At construction stage, given a **Medium** sensitivity and **Medium** magnitude, an overall allocation of **Moderate** effect on this character area has been identified. At operation year 1 the effects will be **Moderate/ Slight not significant**, as the Proposed Scheme would be at variance with the characteristics of this LCA but not to the point of diminishing them. At operation years 15–25 the overall effect would reduce to **Slight**. Once mitigation planting is established and has matured, the new earthworks will blend into the adjoining landscape. It may take several

decades for the interface to completely cease to be apparent; however, the overall landscape effect, compared to the existing road, will be very limited.

Glen Truim: Upper Glen and Dalwhinnie LCA

- 13.4.39 The landscape within this LCA is very open and there is limited tree cover. The landform creates a series of sweeping curves.
- 13.4.40 The Proposed Scheme within this LCA consists of parallel widening predominately to the east of the existing A9, before transitioning to the west side from approximately ch. 28,750. The landscape here is very open to both the east and west side of the road. Replacement wider structures are required to accommodate the widening of the road; over the SSE Aqueduct and Allt Cuaich. A minor diversion of the SSE aqueduct is within the Proposed Scheme. There will also be the creation of several large cuttings and embankments on either side of the road, along with some potential rock cut at approximate ch. 26,200 to 29,600.
- 13.4.41 The main new bit of infrastructure within this LCA is the Dalwhinnie Junction. The Dalwhinnie Junction arrangement is located between approximate ch. 22,000 to 23,000 and requires a replacement larger structure over the Allt Coire Bhathaich (due to wider road) and another over the River Truim to provide the link to the A889 into Dalwhinnie. The arrangement also requires the creation of SuDS basins, as well as new large cuttings and embankments.

Characteristics

- 13.4.42 **Table 13-10** below indicates potential effects upon this LCAs characteristics.

Table 13-10: Potential effects upon Glen Truim Upper Glen and Dalwhinnie LCA key characteristics

Key Characteristics	Potential Effects
Very open character	Some slight reduction during construction but less on completion
Wide floodplain/ strath	In landscape terms the 'wide floodplain' can be associated with the strath. In terms of 'floodplain' this is discussed in Chapter 11 . In terms of the spatial qualities of the strath surrounding the River Truim, the greatest effects are expected at the Dalwhinnie Junction
Sweeping curves	None associated with the mainline – the new road could enhance this characteristic Dalwhinnie Junction - The east/ west link road across the strath is however slightly against the landscape grain which is generally north/ south along this strath
Simple topography	Earthworks are imperative to the interface between the Proposed Scheme with the wider landscape. The design of these earthworks will determine the overall effect on topography. The earthworks have been designed in a sensitive way mindful of context; therefore the overall effect should be minimal. The greatest effects are anticipated at the proposed Dalwhinnie Junction where large areas of cut will occur. There may be local landform effects in some locations, identified within Table 13.12 .
Tree cover	Adjacent to the Proposed Scheme, the woodland of Lechden will be affected around approximate ch. 25,400 and sparse tree planting from ch. 26,000 to the end of the scheme will likely be affected
Heather side slopes	Minimal
Wet heath/ poor grassland in floodplain/ strath	Potential impact on vegetation in strath associated with the Dalwhinnie Junction.

Assessment against Key Objectives

- 13.4.43 The Proposed Scheme is assessed against the LCA objectives established via the A9 Dualling Programme Strategic Landscape Review. The full assessment is set out in **Appendix 13.3** in **Volume 2**.

Magnitude of effect

- 13.4.44 The magnitude of effect of the Proposed Scheme within the Upper Glen and Dalwhinnie LCA, at construction, completion and over the long term are considered below.

Construction phase

- 13.4.45 Mainline construction within this LCA requires parallel widening predominately to the east of the existing A9, before transitioning to the west side from approximately ch. 28,750. It requires replacement with wider structures to accommodate the widening of the road, over the SSE Aqueduct and Allt Cuaich, and the creation of several large cuttings and embankments on either side of the route.
- 13.4.46 The Dalwhinnie Junction arrangement located between approximate ch. 22,000 to 23,000 requires a replacement larger structure over the Allt Coire Bhathaich (due to wider road) and another over the River Truim to provide the link to the A889 into Dalwhinnie. The arrangement also requires the creation of SuDS basins, as well as new large cuttings and embankments, some of which will face Dalwhinnie. These elements combined will have an effect on the immediate local landscape character of the area as they result in the extension of non-natural infrastructure across the strath.
- 13.4.47 Construction from approximate ch. 26,200 to 29,600 where this LCA ends will create significant earthworks and some rock cut exposures. The HML railway is close to the road on the west side for much of this section, presenting a significant constraint to the alignment and necessitating the construction of a retaining wall between approximate ch. 30,600 to 30,800. The works will be restricted to a relatively narrow band within the infrastructure corridor, so effects on the wider landscape will be limited, despite the potentially high visibility of the construction works.
- 13.4.48 A **Medium** magnitude has been allocated for the construction phase within this LCA, as it is a relatively minor change over an extensive area, but with a notable change at the Dalwhinnie Junction area. The majority of works are within an existing infrastructure corridor. The works to the Dalwhinnie Junction are more extensive in a currently open setting; however, the affected area forms a relatively small section of this LCA.

Operational Phase - Completion (Year 1)

- 13.4.49 Upon completion of the construction, the finished earthworks and the relationship of the road and the junction to its adjoining landscape will be clearly evident. Large areas of bare earth will be visible. In relation to Dalwhinnie Junction, and given the generally open character of the landscape in this location, and, the ecological/ habitat mosaic comprising areas of deep peat and wet habitats, extensive woodland planting would not generally be considered appropriate; although new earthworks would be softened and integrated with scrub willow and some limited scattered tree planting.
- 13.4.50 To the east of Dalwhinnie Junction winter resilience, in the form of woodland planting, is part of the Proposed Scheme. This takes the form of an overall 60m band between ch. 22,400 and ch. 23,200 that comprises of a woodland mix with a varied edge, as detailed on the **Environmental Mitigation Drawings 6.1 to 6.11** in **Volume 3**.

- 13.4.51 Winter resilience in the form of woodland planting is also proposed to the east of the mainline at Cuaich. Woodland forms part of the immediate context here, with the Lechden Woods plantation located to the west of the A9, therefore woodland planting will blend into this context. The proposed winter resilience woodland planting is located between approximate ch. 25,400 and 25,700. Existing woodland planting removed as part of the Proposed Scheme construction will be replaced. Tree planting to the west of the mainline and Cuaich is also proposed as a screening function for residents at Cuaich.
- 13.4.52 As noted, woodland is not a noticeable characteristic within this LCA; therefore, the proposed winter resilience will dramatically alter the character, particularly around the Dalwhinnie Junction.
- 13.4.53 Although kept to a minimum within the Proposed Scheme, roadscape furniture will include signs, snow gates, snow poles, barriers and fencing which will increase the roadscape presence within the area. This furniture will however replace existing road furniture, so the overall effect will be very limited due to their scale and nature. A **Medium** magnitude has been allocated within this LCA for the operational phase on completion. The greatest change is at the Dalwhinnie Junction area, where extensive woodland planting is proposed for winter resilience as part of the Proposed Scheme. This will be a relatively minor change in a limited area within the overall landscape.

Operational Phase – Long Term (Year 15-25)

- 13.4.54 Given the generally open character of the landscape, appropriate planting of heather and acid grassland, scrub willow and trees in suitable areas will reduce mainline dualling effects over time, and help to integrate new earthworks with the scrub willow to the west of the road.
- 13.4.55 With respect to the Dalwhinnie Junction, it may take several decades for the interface to cease to be apparent, due to the scale of the works; however, with appropriate establishment of mitigation planting, there will be amelioration of effect over time. Overtime the winter resilience woodland planting at Dalwhinnie Junction and Cuaich will aid woodland connectivity within the area and will become part of the characteristic of this area, however, as noted; it will take some time to establish.
- 13.4.56 Over time the SuDS basins will blend into their surroundings, especially when integrated with locally appropriate planting. Between ch. 27,600 and 29,400 to the west of the mainline, SuDS basins 277, 282, 286 and 293 that generally tie into the embankment slopes of the mainline. The landscape here is very open to the west and planting will mainly comprise grassland and shrub planting. This will aid the blending of these features into this open landscape.
- 13.4.57 Embedded and additional mitigation planting will also establish along the mainline; however, due to the introduction of the large junction a **Medium** magnitude will remain as this introduces a new large infrastructure element to the LCA.

Significance of Effect at Construction and Operation

- 13.4.58 The landscape of the Upper Glen Truim and Dalwhinnie LCA is valued and, with its recognisable view of Dalwhinnie Distillery, is very familiar to many people. The LCA has been allocated a **Medium** sensitivity due to its limited susceptibility to the Proposed Scheme. The landscape is large scale and dramatic. In general, when contrasted with the wider landscape, the proposed changes are very small in comparison to the adjoining hills. All the works will be within the existing infrastructure corridor and so have limited effect, despite the wide visibility. There will be a greater but more local effect at the Dalwhinnie Junction due to the presence of a large junction that goes against the north-south grain of the strath and due to the winter resilience woodland planting. Likewise, the proposed winter resilience woodland planting will alter the existing characteristics at Cuaich.

- 13.4.59 A number of changes also locally occur at Cuaich. SuDS basin 254 is to be constructed within part of Lechden Woods, and therefore removing some of this notable local feature. A left in/ left out access to the properties at Cuaich is provided from the northbound side of the A9. A left in/ left out access is also provided on the southbound carriageway to connect to the existing estate road and to provide access to SuDS basins 258 and 259. These basins are to be constructed at the base of the mainline slopes to the west of the road. To the east of the mainline, new slopes will be constructed and tree planting along the road will be removed. Replacement trees will be proposed, as shown on the **Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3**.
- 13.4.60 As planting matures, the new earthworks will blend into the adjoining slopes, although as noted, this may take a long time for the interface to cease to be apparent. Any scrub/ woodland planting will have matured.
- 13.4.61 From approximate ch. 26,200 to ch. 29,600 where this LCA ends, the landscape is more wooded than further south, so mitigation tree planting has been proposed as part of the **Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3**, to improve the integration of the widened road, to replace the area lost to the works and to minimise the loss of woodland connectivity. Mitigation is detailed in **Table 13-17**.
- 13.4.62 At construction stage, there will be a **Moderate** effect due to the scale of the works, particularly at the Dalwhinnie Junction.
- 13.4.63 At operation year 1, there will continue to be a **Moderate** effect, particularly due to the new Dalwhinnie Junction and the introduction of extensive new features within this open landscape.
- 13.4.64 In the long term at 15 years, once planting has established and been integrated into the LCA, the effect would be reduced to **Moderate/ slight not significant**, due to the effect of particularly the Dalwhinnie Junction. It is anticipated that after 25 years the effect would reduce to **Slight** in light of trees maturing by this point. This is also dependant on the design of slopes adjoining the mainline and junction. Details of the sensitivity of these and specific treatment areas are in **paragraphs 13.4.79 to 13.4.83**. In the absence of mitigation, the long term effect over 15-25 years will be **Moderate** and therefore significant.

Glen Truim LCA

- 13.4.65 The transition into the Glen Truim LCA starts from approximate ch. 29,600 and extends to the north of the Proposed Scheme. This LCA has more sparse tree cover along the road side than other parts of the study area; this and topography create an increased sense of enclosure along the Proposed Scheme. A limited section, approximately 1.2km, of the Glen Truim LCA will be affected by the proposals. The assessment reviews the potential effect on the key characteristics and how the Proposed Scheme responds to the key objectives established for this area.

Characteristics

- 13.4.66 **Table 13-11** below indicates potential effects upon this LCA's characteristics.

Table 13-11: Potential effects upon Glen Truim LCA key characteristics

Key Characteristics	Potential Effects
Intimate scale	Some slight effect due to wider road
Narrow glen floor	None
Rocky hill summits to the west	None

Key Characteristics	Potential Effects
Extensive pine/ birch woodland with mosaic open areas	Minimal effect
Sense of enclosure	Potentially slight effects due to wider road

Assessment against Key Objectives

13.4.67 The Proposed Scheme is assessed against the LCA objectives established via the A9 Dualling Programme Strategic Landscape Review. The full assessment is set out in **Appendix 13.3** in **Volume 2**.

Magnitude of effect

13.4.68 The magnitude of effect of the Proposed Scheme within the Glen Truim LCA, at construction, completion and over the long term are considered below.

Construction phase

13.4.69 Construction within the Glen Truim LCA will require significant earthworks and rock cut. The works will be restricted to a narrow band within this infrastructure corridor, so effects on the wider landscape will be limited despite the potential high visibility of the construction works. At approximate ch. 30,600 to the east of the mainline and the east of the HML railway, SuDS basin 306 will be constructed, and just to the south of this a compensatory storage area. Between ch. 30,600 and 31,000 a retaining wall will be constructed to the northbound mainline. These will have some localised effect on this LCA. A **Medium** magnitude has been allocated to this LCA for the construction phase, as it is a relatively minor change to the wider landscape and is restricted to a limited corridor.

Operational Phase - Completion (Year 1)

13.4.70 Once the construction is complete, the finished earthworks and the relationship of the road to the adjoining landscape will be clearly evident. Large areas of bare earth and rock will be visible. There will be signs, barriers and fencing which could increase the roadscape presence within the wider area. These will however replace existing road furniture, so the overall effect will be very limited. Planting within SuDS basin 306 and the compensatory storage area will not have established yet. A **Medium** magnitude has been allocated to this LCA for the operation phase on completion.

Operational Phase – Long Term (Year 15-25)

13.4.71 In the long term, the following features will have integrated into the surrounding LCA:

- Embankments, cuttings and rock cuts; these will also be vegetated and have elements of natural regeneration vegetation further enhancing these features
- The SuDS basin 306 and the compensatory storage area will be integrated into this landscape with appropriate vegetation
- The proposed retaining wall on the northbound side of the proposed carriageway will help limit the scheme footprint and provides an opportunity to replace roadside vegetation to the west of this structure

13.4.72 With the above being in place, there will be a change in magnitude from completion which will reduce to **Low**.

Significance of Effect at Construction and Operation

- 13.4.73 There will be a number of new embankments and lengths of new rock cut as well as areas of cutting surrounding laybys. Some limited tree cover along the roadside will be lost. A number of changes occur in a localised area between ch. 30,600 and 31,000 where SuDS basin 306, a compensatory storage area and the retaining wall will be constructed. Due to these changes an allocation of **Moderate** effect during construction is given. At operation year 1 any proposed planting will not have established, but the final implementation of the embankments and rock cut will reduce effects to **Moderate/ slight not significant**.
- 13.4.74 Taking additional (secondary) mitigation into account, which includes planting and seeding, the long term effect will reduce to **Slight**. This is due to trees screening and softening the appearance of the Proposed Scheme, as would the natural regeneration of the rock cut and slopes that look to reflect characteristics within the wider LCA. Planting within and surrounding the SuDS basin 306, compensatory storage area and the retaining wall will have established and therefore these features will have become part of the landscape character at this location.

Local Landscape Character Area Effects

- 13.4.75 **Table 13-12** below identifies the effects on each of the LLCAs described in **section 13.1** at Construction Stage, taking the assessment of sensitivity from **Table 13-7** and assessment of landscape features, historic and cultural, landscape fit and landscape experience from **Table 13-8**.

Table 13-12: Potential effects on LLCAs at construction

Assessed LLCA	Potential Effects Commentary	Sensitivity	Magnitude	Overall Effect	Comments on Mitigation
Dail A'Chuirn	<p>As the A9 is being widened to the east in this location, there will be some loss of the functional coniferous tree belt and a reduction in the space between the mainline and tree belt.</p> <p>There will be provision for temporary SuDS during construction close to the road corridor.</p>	Medium	Medium	Moderate	<p>During construction, mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p> <p>Woodland planting to replace any of the functional coniferous tree belts should also be planted as soon as possible.</p>
Tom A'Bhacain	<p>Parts of the functional coniferous tree belt will be affected.</p> <p>There will be further effects on the open grassland characteristics to the west, with general construction activities, likely including temporary SuDS basins.</p> <p>The section of the A889 between the existing Dalwhinnie Junction and where the new Dalwhinnie Junction ties into the A889 will be closed at some point.</p>	Medium	Medium	Moderate	<p>During construction mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created planting should take place in order to help minimise the amount of time bare earth can be seen.</p>
Dalwhinnie	<p>During the construction of the Dalwhinnie Junction there will be considerable amount of change to the local landscape character.</p> <p>Large expanses of open heather moorland and grassland will be removed to construct the new junction.</p> <p>New structures will be created and a lot of currently untouched land within the strath will become an area of major works.</p> <p>There will be some tree loss adjacent to the road and changes to the SSE Aqueduct and the installation of the proposed SSE Aqueduct structure.</p> <p>There will be general construction activities within the road corridor adversely affecting this LCA.</p>	High/medium	High	Substantial	<p>During construction, mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p> <p>Winter resilience and other proposed woodland planting should also be planted as soon as possible, as this planting will take many years to establish so there are benefits to it going in as soon as possible.</p>
Leacainn	<p>This LLCA will be primarily affected by the mainline widening of the existing A9 and the general associated construction activities.</p> <p>The landscape surrounding the road here is very open to the west; therefore the earthworks are very exposed and prominent within the landscape.</p>	Medium	Medium	Moderate	<p>During construction, mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p>

Assessed LLCA	Potential Effects Commentary	Sensitivity	Magnitude	Overall Effect	Comments on Mitigation
Cuaich	<p>There will be some loss to existing vegetation to either side of the road.</p> <p>Construction of the permanent works will include a left in left out access to the A9 mainline at Cuaich, and an underpass is included slightly further to the north than the existing underpass at Cuaich.</p> <p>There will also be the removal of coniferous trees at Lechden Woods due to the construction of SuDS basin 254.</p> <p>SuDS basins 258 and 259 will be constructed to the east of the road at approximate ch. 25,800. These merge into the embankment slope in this location. A small bund adjacent to SuDS basin 258 is proposed as a flood protection measure. This will blend into the slope embankment to the mainline and the slopes to SuDS basin 258.</p>	High/medium	High	Substantial	<p>During construction, mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p> <p>Winter resilience and other proposed woodland planting should also be planted as soon as possible, as this planting will take many years to establish so there are benefits to it going in as soon as possible.</p>
Dallanach	<p>There will be effects on the open strath to the west of the mainline during construction. SuDS basins and access tracks will be constructed to the west.</p>	High/medium	High/medium	Substantial/Moderate	<p>During construction mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road, SuDS basins and access tracks have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p>
Odharaich	<p>Effects will be of a similar nature to those identified for Dallanach, with some tree loss to either side of the A9 through the construction process.</p>	Medium	Medium	Moderate	<p>During construction mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road and for SuDS basins have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p> <p>Woodland planting to replace any lost should also be planted as soon as possible.</p>
Crubenmore	<p>During construction there will be a loss of vegetation to the east and west, including some tree planting.</p> <p>There will be further temporary effects on the heather moorland slopes.</p> <p>A retaining wall is to be constructed between approximate ch. 30,600 and 31,050.</p> <p>SuDS basin 306 will be constructed to the east of the scheme, along with an area of compensatory flood storage to the south of SuDS basin 306.</p>	Medium	Medium	Moderate	<p>During construction mitigation will be limited in terms of being able to reduce effects on the LLCA, however construction is temporary.</p> <p>As soon as earthworks to either side of the road, SuDS basins, compensatory storage area and access tracks have been created, planting should take place in order to help minimise the amount of time bare earth can be seen.</p>

- 13.4.76 **Table 13-13** below identifies the effects on each of the LLCAs described in **section 13.3**, at operation year 1 and operation years 15-25, taking the assessment of sensitivity from **Table 13-7** and assessment of landscape features, historic and cultural, landscape fit and landscape experience from **Table 13-8**. Detailed commentary on the likely effect on the CNP SLQs is included in **Appendix 13.4** in **Volume 2**.
- 13.4.77 Additional mitigation is identified within this chapter to offset potential adverse effects, residual to the embedded mitigation at construction, as described within **Table 13-12**. Therefore, the long term permanent effects, after years 15-25, identified in **Table 13-13**, are assessed to include the embedded and additional (secondary) mitigation. The effect of additional mitigation is further explained in **section 13.5**.
- 13.4.78 While the impact assessment is undertaken in cognisance of the embedded (primary) mitigation features noted above, in order to ensure that all project mitigation requirements (including embedded/ primary, additional and generic best practice construction mitigation) are captured, they have been included within **section 13.5**, and the Schedule of Environmental Commitments contained in **Chapter 21**. The additional mitigation listed in **section 13.5** is what GLVIA 3 refers to as secondary mitigation. Additional mitigation has been included within the assessment of residual effects, presented later in **Table 13-18**.

Table 13-13: Potential Effects on LLCAs at Operation Year 1 and Years 15-25

Assessed LLCA	Potential Effects Commentary	Sensitivity	Operational Impacts Potential effects - Operation Year 1		Comments on Mitigation	Operational Impacts Potential effects - Operation Year 25	
			Magnitude	Overall Effect		Magnitude	Overall Effect
Dail A'Chuirn	<p>As the A9 is being widened to the east in this location, there will be some loss of the functional coniferous tree belt and a reduction in the space between the mainline and tree belt.</p> <p>To the east of the mainline SuDS feature 207 will be located at approximate ch. 20,700 and NCN7 will be realigned around it to the west.</p> <p>This SuDS basin is in a confined location and has been shaped as sympathetically as possible to blend it into the strath.</p> <p>The access track to the east will have a minimal effect on the open characteristics of the heather moorland.</p>	Medium	Low/ Medium	Slight	<p>Grass seeding and shrub planting to reinstate any loss of vegetation to the east will reinstate the local character along the mainline, as well as seeding to SuDS 207.</p> <p>Additional tree planting to the east of the functional coniferous tree belt to mitigate the loss of any near to the road, within the identified winter resilience area 1</p> <p>Tree planting specified as mixed broadleaf woodland to start diversifying the coniferous belt.</p>	Low	Negligible
Tom A'Bhacain	<p>Parts of the functional coniferous tree belt will be affected.</p> <p>There will be further effects on the open grassland characteristics to the west. SuDS basins 203 and 214 will be to the north of the existing Dalwhinnie Junction.</p> <p>The A889 will become a no through road, with access for NMUs only.</p>	Medium	Medium	Slight	<p>Grass seeding and shrub planting to reinstate any loss of vegetation over the proposed embankments will restore the local character of this area.</p> <p>Additional mixed broadleaf woodland to the east of the functional coniferous tree belt.</p> <p>Seeding to the SuDS features and additional planting to reinstate dry heath habitats to the north of these features.</p>	Low	Negligible
Dalwhinnie	<p>At the Dalwhinnie Junction there will be considerable amount of change to the local landscape character.</p> <p>Upon completion of the construction, the finished earthworks and the relationship of the road and the junction to its adjoining landscape will be clearly evident.</p> <p>Large areas of bare earth will be visible.</p> <p>To the east of the Dalwhinnie Junction winter resilience in the form of woodland planting is part of the Proposed Scheme.</p> <p>This takes the form of an overall 60m band from the road between ch. 22,400 and ch. 23,200 that comprises of a 30m earthworks slopes with a mixture of low level planting and shrubs and then a 30m woodland mix area with a varied edge, as detailed on the Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3.</p> <p>Large expanses of open heather moorland and grassland will be replaced with infrastructure and this infrastructure generally goes against the north-south grain of the strath in this location, by crossing it east-west.</p>	High/ medium	High	Substantial	<p>Grass seeding and low level shrub planting will soften the embankments around the Dalwhinnie Junction.</p> <p>Clumps of tree planting are proposed across the junction to improve woodland connectivity with the woodland to the south and west of Dalwhinnie.</p> <p>This is interspersed with shrub planting and wet heath planting, which reflects the characteristics of this landscape.</p> <p>This will then tie into the proposed winter resilience tree planting to the east of the junction.</p> <p>This winter resilience planting will have a feathered eastern edge to help this naturally blend with the surrounding open landscape.</p> <p>Appropriate wet grass mixes are proposed at the SuDS basins 222 and 225, as well as shrub</p>	Medium	Moderate/ slight not significant as the Proposed Scheme would conflict with the LLCA and detract from it but only at a very localised area (south Dalwhinnie)

Assessed LLCA	Potential Effects Commentary	Sensitivity	Operational Impacts Potential effects - Operation Year 1		Comments on Mitigation	Operational Impacts Potential effects - Operation Year 25	
			Magnitude	Overall Effect		Magnitude	Overall Effect
	<p>The junction is cut into the surrounding landscape; however, this will still be a large alteration to the LLCA.</p> <p>There will be some tree loss adjacent to the road and changes to the SSE Aqueduct will have an effect on the characteristic of the open heather moorland.</p> <p>Once complete new access tracks will have some effect on the open heather characteristics.</p>				planting to the eastern slope of SuDS basin 222.		
Leacainn	<p>This LLCA will be affected by the mainline widening of the existing A9.</p> <p>The landscape surrounding the road here is very open to the west; therefore, the earthworks proposed are very exposed and prominent within the landscape.</p>	Medium	Medium	Slight	<p>Embedded mitigation in the form of slope design to the mainline.</p> <p>Grassland seeding and matured shrub vegetation will blend the proposed slopes into the surrounding landscape.</p>	Low/ Medium	Negligible
Cuaich	<p>There will be some loss to existing vegetation to either side of the road.</p> <p>SuDS basin 254 is to be located in Lechden Woods, which will result in the loss of the southern corner of this woodland. The woodland is in a wind-thrown condition.</p> <p>A left in left out access to the A9 mainline is proposed at Cuaich.</p> <p>An underpass is proposed slightly further to the north than the existing underpass at Cuaich.</p> <p>To the east of the A9 SuDS basins 259 and 258 are proposed. These will be located at the bottom of embankment slopes to the mainline.</p> <p>SuDS basin 259 has been orientated to reflect the Allt Cuaich east-west orientation.</p> <p>A small bund adjacent to SuDS basin 258 is proposed as a flood protection measure. This will blend into the slope embankment to the mainline and the slopes to SuDS basin 258.</p> <p>Winter resilience in the form of woodland planting is proposed to the east of the road between approximate ch. 25,400 and 25,700.</p>	High/ medium	High	Moderate	<p>Tree planting will be focused on reinstating any trees lost around the road corridor and to provide screening from properties at Cuaich.</p> <p>Trees lost within Lechden Woods will be replanted in the form of mixed broadleaf woodland.</p> <p>Woodland is proposed for winter resilience to the east of the road.</p> <p>Grass seeding and appropriate shrub/ heath planting will soften the appearance of the proposed embankments and SuDS basins.</p>	Medium	Slight

Assessed LLCA	Potential Effects Commentary	Sensitivity	Operational Impacts Potential effects - Operation Year 1		Comments on Mitigation	Operational Impacts Potential effects - Operation Year 25	
			Magnitude	Overall Effect		Magnitude	Overall Effect
Dallanach	<p>There will be effects on the open strath to the west of the mainline.</p> <p>The slopes to the mainline, SuDS basins and access tracks are proposed to the west.</p> <p>Access tracks in general have been kept to the bottom of slopes to allow SuDS basins to blend out into the wider landscape strath.</p> <p>Within this LLCA slopes to the mainline have been designed to be varied in their gradient to respond to the LLCA.</p>	High/medium	High	Moderate	<p>Grass seeding and matured shrub vegetation will help to blend the proposed embankments into the surrounding area.</p> <p>Access tracks will be constructed so that, over time, they will blend into the landscape.</p> <p>Planting, predominantly grass seeding, to the SuDS basins will help these blend into the landscape.</p>	Medium	Slight
Odharaich	<p>Effects will be of a similar nature to those identified for Dallanach, with some tree loss to either side of the A9 through the Proposed Scheme.</p>	Medium	High	Moderate	<p>Matured replacement tree planting will retain this fairly enclosed character.</p> <p>Grass seeding and shrubs will soften the access tracks and proposed embankments.</p>	Medium/High	Slight
Crubenmore	<p>After construction, there will be an alteration to the characteristics of the LLCA due to the removal of tree planting, the retaining wall and the creation of SuDS basin 306 and the compensatory storage area.</p> <p>Until any planting works are established, these items will be prominent and will conflict with the LLCA.</p> <p>As planting establishes adverse effects will lessen.</p>	Medium	Medium	Moderate	<p>Tree planting to the south of SuDS basin 306 to replace any tree planting lost through construction.</p> <p>Wet seeding and appropriate shrub planting to SuDS basin 306, slopes and compensatory flood storage area.</p>	Low	Slight

Landscape Features - Effects

Landform

- 13.4.79 The landform is the key component of the scenery and is of **High** sensitivity. The horizontal/ vertical alignment looked to improve the environmental fit of the road therefore reducing the associated effects prior to any additional mitigation. The earthworks associated with the dualling are small in comparison with the surrounding landscape. The proposed slopes have been developed with the assistance of Landscape Architects to ensure, where possible, slopes blend well with the adjoining topography.
- 13.4.80 Three principle levels of slope treatment (identified in **Table 13-17**) shall be followed for the grading of embankments in landform-sensitive, priority areas to mitigate the appearance of Proposed Scheme. These are:
- Level 1: Slopes with tree/ shrubs/ scrub planting: Where proposed vegetation will soften engineered slopes
 - Level 2: Open landscapes that have relatively minor topographic variation that only require specification to ensure that the earthworks are softened and reflect the surrounding landform to some extent.
 - Level 3/ Priority Areas: specific locations within open (landform sensitive areas) that will require a detailed specification of slope.
- 13.4.81 The chainage (ch.) locations for each type are shown in **Table 13-17**.
- 13.4.82 Level 3/ priority areas are detailed on the **Environmental Mitigation Drawings 6.1 to 6.8 (Volume 3)** and are labelled as 'landform sensitive earthworks'.
- 13.4.83 For level 3 priority areas, drawings and specifications for each location shall be produced as part of the contract documents, subject to detailed design. This is detailed in **Table 13-17**.

Construction Phase

- 13.4.84 During construction, there will be a large amount of earth stripping, transporting and storing. Upon completion of the construction, the finished earthworks and the relationship of the road within the wider landscape will be clearly evident. Large areas of bare earth will be visible, particularly where acute slope embankment gradients have had to be incorporated to avoid and limit encroachment into the flood plain and at Dalwhinnie Junction, where the proposed junction is cut into the existing ground.
- 13.4.85 The magnitude of effect will be **High/ medium** with overall effect being **Substantial/ moderate**. Especially in particularly sensitive areas, as detailed in **paragraphs 13.4.79 to 13.4.80** above.
- 13.4.86 As stated in the effects descriptions above in **paragraphs 13.4.79 to 13.4.80**, if the mitigation according to the levels identified above and as detailed in **Table 13-17**, is not applied in the areas identified, then there are likely to be long term significant effects on landform and therefore likely detrimental effects on LLCAs.

Operation Phase

- 13.4.87 Naturalistic earthwork gradients and aesthetic design/ specification of landform will provide mitigation at year 1. New planting or re-planting of native mixed woodland trees, shrubs and grass will begin to integrate the earthworks into the landscape context and will reduce effects of the Proposed Scheme.
- 13.4.88 Based on available ground investigation (GI) information at the time of writing, rock cuttings are anticipated between approximately ch. 26,400 and ch. 27,200 to the east of the mainline. Combined with landscape and visual considerations, geotechnical advice should be followed with regards the design of these cuttings in relation to stability, and slope angles; they should aim to achieve the best possible and most natural looking exposures.
- 13.4.89 Between approximate ch. 30,600 and 30,800 a proposed retaining wall is located along the northbound carriageway. In this location, the A9 mainline and the HML railway are very close to one another to the west. Further to the west of the HML railway is SuDS basin 306 and the River Truim. This is a Level 1 landform sensitive area; therefore, this will have minimal impact on the landform at this location.
- 13.4.90 Slopes to SuDS basins have been designed with input from Landscape Architects to ensure the most appropriate design for their location. Embedded mitigation will include planting, primarily in the form of wet grassland. At certain SuDS basins, appropriate wet scrub planting will be required as additional mitigating planting in order to help blend these features into the surrounding landscape context.
- 13.4.91 At year 1 the slopes to both carriageways will be highly evident from the road and the surrounding hills so will have a relatively **High** magnitude of effect. The junction at Dalwhinnie introduces substantial earthworks into the relatively flat strath that will be more noticeable than the earthworks adjoining the mainline. The junction is in cutting and therefore will generally sit below the existing ground level, which does help in terms of making it less visible within the landscape. Given the **High** sensitivity of the landform, and the high visibility of the new earthworks, there will be a **Medium** magnitude of effect and an overall effect of **Moderate/ slight not significant**. This effect is not considered significant due to sensitive earthworks design that replicates the adjoining landform and creates a naturalistic appearance. However, if mitigation is not applied to design of slopes, it is anticipated that there would be a **Substantial/ Moderate and therefore significant** effect at Year 1.
- 13.4.92 With embedded (primary) and additional (secondary) mitigation in place, as detailed in **Table 13.13**, the overall effect will be **Slight/ Negligible** at years 15-25. Without mitigation, the overall long term effect is anticipated to be **Moderate/ Slight and significant**, as an adverse change to the landscape based on the landform characteristics would occur.

Vegetation

- 13.4.93 Vegetation has been assigned a **Medium** sensitivity.

Construction Phase

- 13.4.94 During construction, vegetation within the land made available boundary will likely be removed and soils will be stripped. This will occur wherever construction works will take place.
- 13.4.95 To avoid unnecessary handling and decomposition of the excavated peat structure removed from the works, where possible, the peat will be laid directly within identified restoration areas and

planted with appropriate seeding or translocated heath vegetation, ideally in a single operation. Peat restoration will be visible, appearing similar to the main earthworks. Please see **Chapter 10** for further information on the handling and restoration of peat.

- 13.4.96 Magnitude of effect will be **High/ medium** with overall effect being **Moderate** as there will be a lot of disturbance to vegetation. In the Proposed Scheme location, given the high altitude, vegetation will take a long time to establish, so the removal of it will leave bare patches for many years until vegetation can establish and this will be clearly evident for the construction phase.

Operation Phase

- 13.4.97 It is mainly only the vegetation close to the road that is vulnerable to change; however, it is likely that during construction all the vegetation within the land made available boundary will be affected and will take many years to establish. At year 1, given the **Medium** sensitivity, the magnitude of effect is **Medium** and overall effect is assessed as **Moderate/ slight not significant**.
- 13.4.98 In order to mitigate this effect, all earthworks will be replanted to match the adjoining landscape, so in the long term there will be very limited effect on vegetation. A main permanent effect will be the areas lost to the roadscape. This is minimal in the overall landscape context, even at a local level, as detailed in **Table 13-17**. Therefore, there will be a **Low** magnitude of effect and a **Slight** effect on vegetation by years 15-25.

Woodland

- 13.4.99 Woodland has been assigned a **High** sensitivity.
- 13.4.100 The functional coniferous tree belt between the tie in and ch. 22,300 will be affected at a few areas due to works primarily relating to drainage and compensatory flood storage as part of the Proposed Scheme. Winter resilience in the form of woodland planting is also proposed between approximate ch. 20,150 and 20,500 as an additional strip of woodland to the east of the existing functional coniferous tree belt. Any trees removed from this tree belt shall be replaced with a native woodland mix to allow diversification of species, allow for greater longevity of this feature and to provide a more appropriate woodland type for this landscape, as detailed in **Table 13-17**.
- 13.4.101 Woodland is not a main characteristic of the landscape within the Proposed Scheme extents; in addition to the above, fairly extensive areas of winter resilience in the form of woodland planting are part of the Proposed Scheme. As well as at the existing functional coniferous tree belt between the tie in and approximately ch. 21,900, winter resilience forms part of the Proposed Scheme at the Dalwhinnie Junction between ch. 22,400 and 23,200 and at Cuaich between approximate ch. 25,400 and 25,700. Tree planting to the west of the mainline and Cuaich is also proposed as a screening function for residents at Cuaich. Planting proposals at Cuaich can be seen on **Drawing 6.5** of the **Environmental Mitigation Drawings** in **Volume 3**.
- 13.4.102 As noted, woodland is not a noticeable characteristic within the study area; therefore, the proposed winter resilience will dramatically alter the character around the Dalwhinnie Junction and at Cuaich.

Construction Phase

- 13.4.103 With reference to **Chapter 12**, total existing woodland or woodland and scrub (of various types differentiated within the ecological assessment) that will be affected by the Proposed Scheme is approximately **7.35 ha** overall, as set out below:

Type	In hectares
Conifer Plantation	5.505
Broadleaved Plantation	0.670
Total woodland areas	6.175
SWS Scattered Woodland/ Scrub	0.017
W11	0.007
W17d	0.979
W18	0.067
W23	0.102
Total woodland and scrub areas	1.17

13.4.104 Due to there being removal of trees during construction at a number of locations throughout the Proposed Scheme, there will be a **High** magnitude of effect and overall **Moderate** effect on woodland during construction. The associated loss of woodland has been calculated resulting in approximately 7 – 8ha removed by the Proposed Scheme (woodland and scrub combined).

13.4.105 Mitigation using native shrubs and trees should aim to seamlessly harmonise with ecological planting, in order to integrate the embankments and new road into adjacent highly sensitive landscape. Planting and seeding on new slopes will be restricted to appropriate native mixed shrub and tree planting of local provenance. Where some of the existing tree belt will be intact but where trees have been removed, native mixed species, trees and shrubs will be planted to reduce the impact of exposed woodland edge.

Operation Phase

13.4.106 The proposed landscape strategy will deliver the following woodland/ scrub habitats as part of the overall Environmental Mitigation design as illustrated on the **Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3:**

- Native Woodland = 11.45 ha
- Wet Woodland = 5.58 ha
- Native Woodland Edge = 4.77 ha
- Shrub/ Scrub = 4.57 ha

13.4.107 The total proposed habitat creation is approximately **26.37 ha** woodland, woodland edge and shrub/ scrub. The majority of the wet woodland is located in locations with a wet mosaic of existing habitats and a significant element of the native woodland and woodland edge is either like-for-like replacement of, or new, winter resilience. The proposed winter resilience planting is based on native species mixes rather than exotic trees such as Lodgepole Pine, as many of the existing shelterbelts are.

13.4.108 At year 1 the effect will remain similar to that at construction, due to replacement planting being small stock that will not have grown and there still being potentially bare areas, therefore resulting in a **Medium** magnitude of effect and giving an overall **Moderate** effect.

13.4.109 At years 15-25 there will be a **Low** magnitude of effect and an overall **Slight** effect, with potential for beneficial effects once replacement planting has established. There is an opportunity to replant with extended and more diverse woodland along the road corridor and in particular at the snow tree belt in between the tie in and ch. 22,300, Dalwhinnie Junction, Lechden Woods, Cuaich and at Crubenmore to the north of the Proposed Scheme around ch. 30,600 and 30,800. The proposed woodland planting (some of which is part of the Proposed Scheme in the form of winter resilience and some is additional mitigation as detailed in **Table 13-17**) will increase woodland connectivity within the study area and will diversify species within the area, which in turn will likely have beneficial effects.

Wildness

13.4.110 Wildness has been assigned a **High/ medium** sensitivity.

Construction Phase

13.4.111 Activity associated with the construction of the Proposed Scheme will detract from the overall sense of wildness for the duration of the works, but this will be relatively short-term and limited to the existing road infrastructure corridor. It is therefore considered that there will be a **Low** magnitude of effect resulting in a **Slight** effect overall during construction.

Operation Phase

13.4.112 Effects at year one are anticipated to be the same as at construction, a **Low** magnitude of effect resulting in a **Slight** overall effect, due to a sense of change in the area due to the Proposed Scheme and replacement planting not being established and bare earth still occurring in some locations.

13.4.113 At years 15-25 the magnitude of effect will be **Low/ none** with an overall reduced effect to **Negligible** as, once planting to the Proposed Scheme is established, the sense of wildness will be perceptible and will not be adversely affected by the Proposed Scheme.

Water

13.4.114 Water has been assigned a **Medium/ low** sensitivity.

13.4.115 There are a number of major and minor watercourses crossing under the road, and there will be new structures and culverts constructed to accommodate these, together with some cascades to resolve level changes. Many of the existing cascades to the east of the A9 were constructed in the 1970s and have an artificial appearance, and many of these will require diversion and reconstruction. It is intended that such cascades will be reconstructed potentially incorporating use of site-won natural stone.

13.4.116 The effects on water features will be very limited. The Dalwhinnie Junction, as part of the Proposed Scheme, will provide a new bridge over the River Truim. This will have an effect on the landscape of the watercourse. As noted in **Chapter 14**, there is a requirement for an aesthetically pleasing structure to reduce adverse visual effects from receptors. This will also be required to reduce adverse effects on the landscape.

13.4.117 There will be a crossing of the SSE Aqueduct; this is an artificial watercourse and the crossing will not change its landscape character.

13.4.118 Allt Cuaich is a major watercourse with an existing bridge that will be replaced through the Proposed Scheme to allow for the road dualling. The relationship with the water course will not be altered.

Construction Phase

- 13.4.119 There is likely to be **High** magnitude of effect and overall **Moderate** effect on the watercourses crossing the line of A9 during construction.

Operation Phase

- 13.4.120 The construction stage effect will be mitigated through sensitive naturalistic design, as detailed in **Table 13-17**. Therefore, the magnitude of effect at year 1 will be **Low** with the overall effect being **Slight**. In the long term, years 15-25, magnitude of effect will be **Low/ none** with the overall effect being **Negligible**.

Historic and Cultural Associations and Built Environment

- 13.4.121 The features that have a number of historic and cultural associations are important features within the study area and have a **Medium** sensitivity. These are primarily settlements at Dalwhinnie and Cuaich, Dalwhinnie Distillery, GWMR and the hills/ Munros.

Construction Phase

- 13.4.122 During construction, there is likely to be a **Medium/ low** magnitude of change with an overall **Moderate/ slight not significant** effect on the perception of these cultural features, due to most of them not being directly affected by the Proposed Scheme.

Operation Phase

- 13.4.123 At year 1 there will be a **Low** magnitude of change and overall **Slight** effect, with this further reducing at year 15-25 to a **Low/ no** magnitude of change with overall **Negligible** effect. As noted above this is due to the Proposed Scheme not directly affecting any of the cultural features of the landscape, and in the long term any changes will have been accommodated within the landscape.

Landscape Fit

- 13.4.124 The Proposed Scheme alignment largely follows the existing road, which as determined in the baseline assessment has a good landscape fit. The Proposed Scheme is online widening of the existing A9, which follows the curves found within the landscape. Therefore, the Proposed Scheme has a good landscape fit, with the only element slightly incongruous to this being the Dalwhinnie Junction, which cuts east-west across the north-south strath.

Landscape Experience from the A9

- 13.4.125 Landscape experience has been assigned a **High/ medium** sensitivity. The landscape experience is inevitably subjective, dependent on each individual.

Construction Phase

- 13.4.126 Infrastructure has been kept to a minimum within the Proposed Scheme; however, there is a perception that any infrastructure and furniture associated with the road may cause clutter within the road corridor landscape. There will be signs, barriers and fencing which could increase the roadscape presence within the local area. These will however replace existing road furniture so the overall effect will be limited, due to their scale and nature.

- 13.4.127 Landscape Experience from the A9 at Construction Phase has been allocated a **Medium** magnitude of change, with an overall **Moderate** effect because of the presence of construction traffic, plant, and temporary works, albeit in a limited area.

Operation Phase

- 13.4.128 On completion at operation phase year 1, there is likely to be a **Low** magnitude of change, as the experience of the surrounding landscape will largely return to a settled state. The overall effect is **Moderate/ slight significant**. This is due to there being a vast amount of changes along the road corridor, altering the perception of the landscape. At Operations Years 15 – 25, magnitude of effect will be **Low** with an overall **Slight** effect. The Proposed Scheme will slightly alter the perception of the landscape; especially with new elements such as winter resilience planting that largely increase the presence of woodland along the roadside, creating a sense of enclosure at Dalwhinnie and Cuaich that is not present within the current landscape. As noted, landscape experience is very subjective and therefore the alterations experienced through the Proposed Scheme could be either adverse or beneficial for different people.

Special Landscape Area (SLA)

Construction and Operation Phase

- 13.4.129 The Ben Alder Laggan and Glen Banchor SLA covers the northern section of the Proposed Scheme from approximate ch. 29,800 to 31,050 (the end of Project 8). The Proposed Scheme is at the extreme south-eastern edge of this designated area, as shown on **Drawing 13.2** within **Volume 3**.
- 13.4.130 The SLA designation indicates that the landscape here is highly valued; however, the existing A9 is peripheral to the designated area and the character of the designated landscape will not be susceptible to dualling of the existing road. A **Medium** sensitivity is allocated.
- 13.4.131 The magnitude of effect of the Proposed Scheme on the designated area will be very limited even during construction; so a low magnitude is anticipated. This results in a **Slight** overall effect, and no real effect on the character of the SLA is anticipated. Even during the construction phase, the extent of earthworks and woodland loss is minimal in terms of the overall designated area. **Table 13-14** states the potential effects on the qualities of the SLA.

Table 13-14: Effects on SLA special qualities

Special Qualities	Potential Effect
A contrasting combination of glens, mountains with small scale rocky landforms in between, form a fairly chaotic composition with roads and reservoirs forming the main ordering elements	The Proposed Scheme will retain its function as an ordering element within the landscape
A dynamic sense of place is experienced through ever changing combinations of high mountain, craggy knolls and ridges, smooth moorland, dark coniferous forest and native broadleaf woodland, flat farmed strath and open loch	The Proposed Scheme will have no effect on this quality
The Dirc Mhór, off the beaten track in the hills west of Dalwhinnie, is one the country's best examples of a glacial meltwater channel	Though relatively close to A9, Dirc Mhór is not visible from the road so will be unaffected by the Proposed Scheme
The Monadhliath mountains form a simple landform horizon to the north in contrast to Ben Alder and Creag Meagaidh which have a more variable form	The Monadhliath horizon remains a key feature of the road between approximate ch. 21,750 and 28,750 and is less important from ch. 28,750 northwards within the SLA as Crubenbeag and Crubenmore limit wider views

Special Qualities	Potential Effect
Sensitivity to change	Potential effect
Additional tracks or widened tracks in upland areas which would require significant cut and fill and would result in visible scarring of the hill sides	The Proposed Scheme and associated access tracks will result in hillside scarring – however it is proposed that mitigation to minimise this will be implemented
Further buildings or structures or other proposals within the straths which would result in the removal of deciduous tree cover could upset the existing balance of openness and enclosure	The Proposed Scheme construction will result in loss of deciduous trees in this section. A plan to mitigate this loss will be implemented
Further woodland planting could screen views to local built heritage features or reduce the variety of views and the quality of the travel experience	To reinforce the existing landscape pattern and to maintain key views from the road and the quality of the travel experience
Potential for landscape enhancement	Potential applicability
More restocking with native broadleaf woodlands and using current best forest design practice could improve the relationship of the woodland to the underlying landscape characteristics	The mitigation planting will be carefully designed to fit with the landscape
Promote natural regeneration of native broadleaf woodland within the straths while ensuring that key views to historical buildings and features are retained or enhanced	The mitigation planting will be carefully designed to maximise the use of appropriate broadleaf woodland

Summary of Effects on Landscape Receptors

- 13.4.132 At Construction phase, there would be significant **Moderate** effects on all of the LCAs (Drumochter Pass and Glen Truim: Upper Glen and Dalwhinnie and Glen Truim). There is also **Substantial** or **Moderate** and therefore significant effects on all of the LLCAs (Dail a Chuirn, Tom A’Bhacain, Dalwhinnie, Leacainn, Cuaich, Dallanach, Odharaich and Crubenmore). There are **Substantial** or **Moderate** effects on landscape features landform, vegetation, woodland and water and on landscape perceptual feature of landscape experience.
- 13.4.133 **Table 13-15** below summarises the assessment on landscape features and perception at construction, and **Table 13-16** further below summarises these at operational year 1 and years 15-25.
- 13.4.134 At operational phase year 1, these effects will have diminished but a number will remain significant, due to mitigation primarily in the form of planting, having not had time to establish.
- 13.4.135 At operational years 15 – 25, in all cases, the potential effects reduce in the long term with no significant residual effects when mitigation is in place and planting has established. There is potential for beneficial effects on woodland.

Table 13-15: Potential Effects on Landscape Features and Perception at Construction

Assessed item	Sensitivity	Magnitude	Overall Effect
Landform	High	High/ medium	Substantial/ moderate
Vegetation	Medium	High/ medium	Moderate
Woodland	High	High	Moderate
Wildness	High/ medium	Low	Slight
Water	Medium/ low	High	Moderate
Historic and Cultural Associations and Built Environment	Medium	Medium/ low	Moderate/ slight not significant
Landscape Experience	High/ medium	Medium	Moderate

Table 13-16: Potential Effects on Landscape Features & Perception, Operation Year 1 and Years 15-25

Assessed item	Sensitivity	Operational Year 1		Operational Year 15-25	
		Magnitude	Overall Effect	Magnitude	Overall Effect
Landform	High	High	Moderate/ slight not significant	Medium	Slight/ negligible
Vegetation	Medium	Medium	Moderate/ slight not significant	Low	Slight
Woodland	High	Medium	Moderate	Low	Slight with potential for beneficial effects
Wildness	High/ medium	Low	Slight	Low/ none	Negligible
Water	Medium/ low	Low	Slight	Low/ none	Negligible
Historic and Cultural Associations	Medium	Low	Slight	Low/ none	Negligible
Landscape Experience from the A9	High/ medium	Low	Moderate/ slight significant	Low	Slight

13.5 Mitigation

13.5.1 This section discusses mitigation in relation to the construction and operation phases of the Proposed Scheme.

Standard, Embedded and Additional (Project Specific) Mitigation

13.5.2 There are standard mitigation measures that are common to the A9 Dualling Programme. A number of the measures have been identified as being relevant to reduce the overall impacts of the Proposed Scheme as listed in **Table 13-17**, items SMC-LV1 to SMC-LV7. Standard mitigation applies to both the Landscape and Visual elements affected by the Proposed Scheme.

13.5.3 Embedded Mitigation measures are project specific and are included in the design of the Proposed Scheme. For clarity, these are also included in **Table 13-17, items P08-LV1 to P08-LV2**, where relevant to this chapter. Note that the initial impact assessment has included consideration of these measures.

13.5.4 There is also project specific mitigation which includes additional mitigation measures which have been identified as part of this EIA process and which apply specifically to the Landscape resource affected by the Proposed Scheme. These are also listed in **Table 13-17**.

13.5.5 The key principles for earthwork/ landform design as additional mitigation include the following:

- The landform design shall achieve integration with the surrounding local landscape to reduce adverse landscape and visual impacts through the following aspects
 - The creation of smooth flowing slope profiles which reflect and are in character with the naturally occurring adjoining topography in terms of gradients, scale and form
 - Ensuring varying slope profiles in both cross and longitudinal section
 - Forming naturalistic transitions in gradient including rounding the tops and bottoms and grading-out of side slopes to provide a smooth transition into the adjoining landforms and more closely resemble the surrounding landscape character
 - Integrating earthworks with structures, planting and existing ground levels

- 13.5.6 **Figure 13-1** illustrates a typical approach to be taken in the Proposed Scheme; embankments are to be modified to integrate with existing natural topography, reflecting the adjacent natural landform.

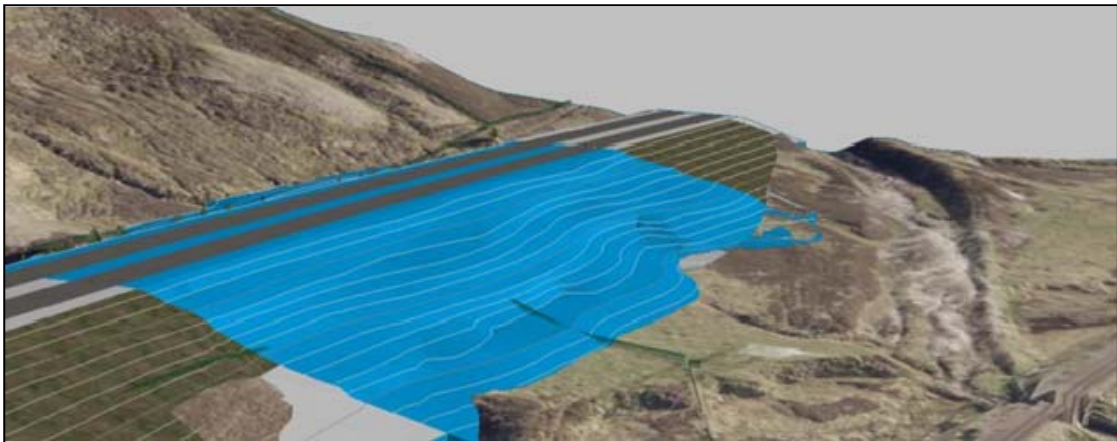


Figure 13-1: Rendered 3D model to convey the landform specification

- 13.5.7 Three levels of specification of landform are set out:

- Level 1 - no specific requirements over and above the general requirements; it is appropriate to plant trees/shrubs/scrub on these slopes
- Level 2 - a blanket requirement applicable to open landscape of relatively minor topographical variation, that is achievable in all locations at minimal additional cost, utilising few detailed design metrics, particularly top and toe rounding and long section variability to ensure that the earthworks are softened and reflect the surrounding landform to some extent; the extent of variation need not be large
- Level 3 - specific locations within landform sensitive areas that will require a detailed specification of significant variation for particularly sensitive, highly visible slopes.

Seeding and Planted Features

- 13.5.8 The embedded and additional mitigation design has been developed mindful of the sensitivity of the local landscape character, visual amenity, ecological designations (SSSI/ SPA/SAC) and the CNP SLQ's. The current A9 corridor and associated roadside woodland/ plantation vegetation provides relevant context to the existing functional shelterbelts, which offer a degree of route resilience during winter months and are prominent landscape features.
- 13.5.9 The Proposed Scheme involves the removal of certain sections of this woodland due the route widening and introduction of the new junction at Dalwhinnie and left-in-left-out access at Cuaich. In line with current policy and the requirement to deliver adequate mitigation to offset any associated significant effects, both in relation to landscape and visual effects, **Drawings 6.1 – 6.11** in **Volume 3** and **Appendix 6.1** in **Volume 2** have been developed following detailed discussions with CNP and SNH.

Monitoring Requirements

- 14.5.1 Embedded and additional elements implemented as part of the mitigation works shall be monitored during the contract to ensure they are well maintained and that planting becomes established, effectively mitigating landscape as well visual as impacts. Monitoring will inform promotion of best practice to all landscape works, particularly to prevent damage to planting during the establishment period, and will ensure corrective action is taken where necessary.

- 14.5.2 Monitoring shall be carried out during the agreed contract maintenance period, in tandem with normal maintenance supervision, with specific regard:
- earthwork, rock cutting, and retaining wall mitigation measures
 - planting/seeding of acid and wet grassland, dry and wet heath, including
 - scrub/shrub, woodland edge and woodland
- 14.5.3 Monitoring includes assessment of planting environments; species selection; the use of planting techniques to ensure effective establishment; the effectiveness of fencing and vegetation protection against sheep, cattle, wild fauna, pest infestation, and of the effectiveness of horticultural practice during the agreed landscape maintenance period and landscape planting management.
- 14.5.4 This also includes monitoring of existing woodland health and stability, assessment of the effect of removal of woodland edge on conifer shelterbelts, new understorey planting of trees to the woodland edge to ameliorate the effect of wind exposure (in respect to wind throw).
- 14.5.5 This is explained further within **Appendix 6.1 and 13.3 (Volume 2)**, in relation to the proposals illustrated on **Environmental Mitigation Drawings 6.1 – 6.11** in **Volume 3** of this report. The effectiveness of such treatment will assist in determining long-term maintenance and planting strategies.

Table 13-17: Standard mitigation commitments for landscape and visual effects and specific mitigation commitments for landscape effects

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
Standard A9 Mitigation					
SMC - LV1	Throughout Proposed Scheme	Construction	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.	To reduce the duration of any landscape and visual impacts	None required
SMC - LV2	Throughout Proposed Scheme	Pre-Construction & Construction	As far as practicable, construction plant and materials storage areas will be appropriately sited to minimise their landscape and visual impact.	To reduce landscape and visual impact of plant and material storage areas.	None required
SMC - LV3	Throughout Proposed Scheme	Construction	Construction sites will be kept tidy (e.g. free of litter and debris).	To reduce visual impact of construction sites	None required
SMC - LV4	Throughout Proposed Scheme	Construction	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.	To reduce light pollution/glare during night-time working.	None required
SMC - LV5	Throughout Proposed Scheme	Construction	To protect soil quality for the purposes of landscape planting, the following measures will be implemented: <ul style="list-style-type: none"> • 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. • 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. 	To protect soil quality for the purposes of landscape planting.	None required
SMC - LV6	Throughout Proposed Scheme	Construction	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.	To limit vegetation loss as far as practicable.	None required
SMC - LV7	Throughout Proposed Scheme	Pre-Construction	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.	To protect existing trees and shrubs unaffected by the proposed scheme.	None required
n/a (note)	n/a	n/a	Further to the above, mitigation items SMC-E7 and SMC-E8 (as detailed in Chapter 12 in Table 12.21: Ecology and Nature Conservation) will be implemented to protect vegetation which is identified to be retained.	To protect vegetation which is identified to be retained.	n/a

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
Embedded Mitigation					
P08-LV1	Throughout Proposed Scheme	Design/ Construction	<p>Slope and retaining wall treatment</p> <p>The whole of the Proposed Scheme is landform sensitive to varying degrees of importance, as landform creates the main interface between the surrounding character and the mainline.</p> <p>Landscape Architects have assisted in setting the slope gradients from the A9 verge to the surrounding land.</p> <p>This assessment and initial design work has identified three levels of landform sensitivity as follows:</p> <ul style="list-style-type: none"> • Level 1: Slopes where it is appropriate to plant trees/ shrubs/ scrub • Level 2: Open landscapes that have relatively minor topographic variation that only require specification to ensure that the earthworks are softened and reflect the surrounding landform to some extent • Level 3/ Priority Areas: specific locations within landform sensitive areas that will require a detailed specification of slope. <p>Level 1 areas are identified between the following chainages, north and southbound:</p> <ul style="list-style-type: none"> • Tie in with Project 7 and ch. 20,000 – 23,650 • 29,975 – 31,050 <p>Level 2 areas are identified between the following chainages, north and southbound:</p> <ul style="list-style-type: none"> • 23,650 – 29,975 <p>Level 3/ Priority areas northbound have been identified between the following chainages:</p> <ul style="list-style-type: none"> • 23,650 – 24,100 • 26,250 – 26,500 • 27,300 – 30,175 <p>Level 3/ Priority areas southbound have been identified between the following chainages:</p> <ul style="list-style-type: none"> • 23,700 – 25,325 • 26,225 – 26,475 • 27,350 – 27,450 • 27,650 – 27,825 • 27,900 – 28,125 • 29,190 – 29,700 • 29,775 – 29,975 <p>See mitigation item P08-LV3 for further information.</p>	<p>To mitigate adverse landscape effects of the Proposed Scheme from sensitive receptors/ users, slopes shall have a natural appearance so that they blend into the very open surrounding landscape and contain appropriate planting as shown on the Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3.</p> <p>This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.</p>	Not Applicable

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-LV2	Throughout Proposed Scheme	Design/ Construction	<p>SuDS basins</p> <p>Landscape Architects have influenced the design of the SuDS that form part of the Proposed Scheme.</p> <p>These have been shaped as best possible to blend into surrounding topography and to look like natural features within this open landscape.</p> <p>See mitigation item P08-LV13 for further information.</p>	<p>To mitigate adverse landscape effects of the SuDS basins from sensitive receptors of the LCA, LLCAs, landscape features and landscape perceptions.</p> <p>This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.</p>	Not Applicable
Project Specific Mitigation					
P08-LV3	Throughout Proposed Scheme	Design/ Construction	<p>Slope treatment</p> <p>As noted within embedded mitigation item P08-LV1, the whole of Project 8 is landform sensitive to varying degrees of importance.</p> <p>New embankments and cuttings for all level 1, 2 and 3 slopes shall be feathered into the toe/ top of existing gradients at varying profiles to form slopes of natural appearance that integrate into the sensitive landscape context, where indicated on Environmental Mitigation Drawings 6.1 to 6.11, contained within Volume 3 of this report, subject to detailed design as additional mitigation.</p> <p>For level 3 priority areas, drawings and specifications for each location shall be produced as part of the contract documents, subject to detailed design.</p> <p>This will detail the desired contours, with cross sections to indicate how these slopes should be constructed.</p> <p>Landscape and visual considerations shall be coordinated with structural engineering and geotechnical advice for design in relation to stability and appearance of retaining walls and rock cuts subject to detailed design.</p> <p>Level 3/ Priority areas northbound have been identified between the following chainages:</p> <ul style="list-style-type: none"> • 23,650 – 24,100 • 26,250 – 26,500 • 27,300 – 30,175 <p>Level 3/ Priority areas southbound have been identified between the following chainages:</p> <ul style="list-style-type: none"> • 23,700 – 25,325 • 26,225 – 26,475 • 27,350 – 27,450 • 27,650 – 27,825 • 27,900 – 28,125 • 29,190 – 29,700 • 29,775 – 29,975 	<p>To mitigate adverse landscape effects of the Proposed Scheme from sensitive receptors/ users, slopes shall have a natural appearance so that they blend into the very open surrounding landscape and contain appropriate planting as shown on the Environmental Mitigation Drawings 6.1 to 6.11 in Volume 3.</p> <p>This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.</p>	Transport Scotland

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
			Types of planting will be location specific and in line with the developed Environmental Mitigation Drawings 6.1 to 6.11 , contained within Volume 3 of this report.		
P08-LV4	Throughout Proposed Scheme	Design/ Construction/ Operational Phase	<p>Planting (including seeding) to either side of the road</p> <p>Planting should be as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>All planting has been designed to be appropriate to the setting of the scheme and to reduce adverse landscape effects on landscape receptors.</p> <p>Specific elements of this are detailed below.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable
P08-LV5	Throughout Proposed Scheme	Design/ Construction/ Operational Phase	<p>Road signage/ furniture</p> <p>Minimisation of roadscape features such as signs and barriers at more open areas, such as to the north of Dalwhinnie Junction between ch. 23,000 and 25,000 and north of Cuaich between 26,200 and 30,000.</p> <p>These items are expected along a road scheme of this nature, however minimising them to the necessary requirements will help with the enjoyment of the high quality landscape surrounding.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable
P08-LV6	Ch. 20,400 to 22,200	Design/ Construction/ Operational Phase	<p>Existing functional coniferous tree belt</p> <p>Between ch. 20,400 and 22,200 any woodland/ vegetation lost during construction and the maintenance period shall be replaced with native mixed proposed woodland species to increase biodiversity and enhance landscape character.</p> <p>Planting as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable
P08-LV7	Ch. 21,900 to 23,200	Design/ Construction/ Operational Phase	<p>Dalwhinnie Junction and A889 tie-in</p> <p>Slopes to the Dalwhinnie Junction form part of the embedded mitigation for the scheme as detailed in item LV01.</p> <p>Planting to the Dalwhinnie Junction has been developed through consultation with the CNPA.</p> <p>Planting shall be delivered as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>Planting structure around the junction will comprise trees, shrubs and low level heath and grassland appropriate for this landscape, to allow certain aspects of the engineered junction to be screened and to allow certain views to be framed, such as views towards Dalwhinnie Distillery from the mainline.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. Particularly in the Glen Truim Dalwhinnie and Upper Glen LCA and Dalwhinnie LLCA. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-LV8	Ch. 22,300 to 23,400	Design/ Construction/ Operational Phase	<p>Mitigation to winter resilience tree planting to east of Dalwhinnie Junction</p> <p>Winter resilience in the form of a tree belt forms part of the Proposed Scheme to the east of the mainline between ch. 22,400 and 23,250.</p> <p>In order to allow this tree planting to look as natural as possible within this open landscape, additional planting to the east of this has been proposed, as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>This is to allow a greater variety of planted species to be specified, which will allow this feature to blend into the landscape over time and not be a single species planted in a regular manner.</p> <p>A feathered edge will be achieved to the east of this plantation.</p> <p>This approach has been developed in conjunction with CNPA.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable
P08-LV9	Ch. 23,000 to 24,600	Design/ Construction/ Operational Phase	<p>Planting to either side of the road and to help screen the SSE Aqueduct structure</p> <p>Tree planting removed through the construction of the Proposed Scheme shall be replaced, including tree planting to the north of the SSE Aqueduct structure.</p> <p>This is to reduce adverse landscape character effects; planting of varying types (trees, shrubs, low level heath/ grassland) will be implemented as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions.	Not Applicable
P08-LV10	Ch. 25,300 to 26,000	Design/ Construction/ Operational Phase	<p>Cuaich and Lechden Woods</p> <p>Planting to this area has been developed through consultation with the CNPA. Planting should be delivered as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>The replacement planting at Lechden Woods, adjacent to approximate ch. 25,400, with enhancement to the woodland in terms of increasing species of planting.</p> <p>Tree planting to the east of the road between approximately ch. 25,400 and 25,700 relates to areas of winter resilience as identified as part of the Proposed Scheme.</p> <p>Riparian planting is proposed surrounding SuDS basins 258 and 259 and along the Allt Cuaich to mitigate adverse landscape effects of the Proposed Scheme and respond to this landscape.</p> <p>Planting should be as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. Particularly in the Glen Truim Dalwhinnie and Upper Glen LCA and Cuaich LLCA. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable
P08-LV11	Ch. 20,000 to 21,900 and ch. 26,200 to 31,050, primarily to the west of the road	Design/ Construction/ Operational Phase	<p>Planting to slopes, SuDS basins and drainage features to reduce landscape effects</p> <p>Planting should be as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>In these identified chainages the HML railway is close to the Proposed Scheme (and is very close to the Proposed Scheme between ch. 26,200 and 31,050) and NCN7 is close to the road between ch. 20,000 and 21,900.</p> <p>Therefore, additional planting is required surrounding SuDS basins 207, 213, 214, 277, 282, 282, 286, 293 and 306.</p> <p>Planting to primarily respond to riparian characteristics to the west of the A9 responding to the River Truim.</p>	To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions. This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.	Not Applicable

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-LV12	Ch. 29,600 to 31,050	Design/ Construction/ Operational Phase	<p>Planting surrounding SuDS basin 306 and treatment of retaining wall</p> <p>Tree planting to the south of SuDS basin 306 to mitigate adverse visual effects from receptors to the west of the Proposed Scheme and to screen views towards retaining wall.</p> <p>Planting should be as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p> <p>Appropriate wet grass species to be planted to SuDS basin 306 to blend into landscape to reduce adverse landscape effects.</p>	<p>To ensure reduced effects of the Proposed Scheme on the characteristics of the LCA, LLCAs, landscape features and landscape perceptions.</p> <p>This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.</p>	Not Applicable
P08-LV13	Throughout Proposed Scheme	Design/ Construction	<p>SuDS basins design refinement</p> <p>Landscape Architects have influenced the design of the SuDS basins that form part of the Proposed Scheme as detailed in embedded mitigation item P08-LV2.</p> <p>Further design shall integrate SuDS basins with roadside slopes (including slopes to access tracks) at SuDS basins 233, 258, 259, 277, 282, 286 and 293.</p> <p>SuDS basins are landform sensitive and shall look as natural as possible to blend into surrounding, very open, landscape.</p> <p>Appropriate seeding and planting is required as specified on Environmental Mitigation Drawings 6.1-6.11, contained within Volume 3 of this report.</p>	<p>To mitigate adverse landscape effects of the SuDS basins from sensitive receptors of the LCA, LLCAs, landscape features and landscape perceptions.</p> <p>This approach is aligned with Appendix 13.3 Section 4, Landscape Objectives of Volume 3.</p>	Transport Scotland
P08-LV14	Throughout Proposed Scheme	Design Construction	<p>Planting to SuDS basin slopes and drainage features</p> <p>Planting should be as indicated on Environmental Mitigation Drawings 6.1-6.11 in Volume 3 of this report.</p> <p>Locally excavated surface vegetation turves, supplemented with wet grass species shall be planted to SuDS basins, drainage channels and compensatory storage areas to blend with locally adjacent habitats.</p> <p>Seeding and scrub planting shall be used to soften SuDS basin excavations/ earthworks/ slopes and drainage features to integrate landscape mitigation with adjacent habitat features.</p>	<p>To mitigate adverse landscape effects of the SuDS basins on the landscape characteristics of the LCA, LLCAs, landscape features and landscape perceptions.</p> <p>This approach aligns with Appendix 13.3 Section 4, Landscape Objectives of Volume 3</p>	Not Applicable

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P08-LV15	Throughout Proposed Scheme	Design Construction Post-construction	<p>Monitoring:</p> <p>All mitigation measures</p> <p>All landscape and visual mitigation items (where indicated on Environmental Mitigation Drawings 6.1 – 6.11 in Volume 3 of this report) shall be monitored during the agreed contract maintenance period, and appropriate remedial actions shall be taken where landscape and visual mitigation fails to establish, in specific regard to:</p> <ul style="list-style-type: none"> o earthworks, rock cutting, and retaining wall mitigation measures o planting/seeding of acid and wet grassland, dry and wet heath o scrub, shrub, woodland edge and woodland planting <p>Monitoring will assess planting selection/techniques and long-term landscape planting management, including fencing and vegetation protection against sheep, cattle, wild fauna, pest infestation, and horticultural practice, particularly to prevent damage to planting during the establishment period.</p> <p>Monitoring will also include assessment of existing woodland health and stability, and removal and replanting of woodland edge to ameliorate wind throw in conifer shelterbelts, as explained further within Appendix 6.1 and 13.3 in Volume 2, and where indicated on Environmental Mitigation Drawings 6.1 – 6.11 in Volume 3 of this report, in conjunction with the Outline Peat Management Plan (OPMP, refer to Mitigation Items P08-G6 and P08-G7 in Chapter 10) and Outline Habitat Management Plan (OHMP, refer to Mitigation Item P08-E20 in Chapter 12).</p> <p>All monitoring shall be subject to detailed specification.</p>	<p>To inform management and maintenance strategies so slopes, retaining walls, cuttings, vegetation and trees are well maintained and that planting becomes established, mitigating adverse landscape effects of the Proposed Scheme on the landscape characteristics of the LCA, LLCAs, landscape features and landscape perceptions and habitat.</p> <p>This approach aligns with Appendix 13.3 Section 4, Landscape Objectives of Volume 3 (all items).</p>	<p>Transport Scotland CNPA SNH</p>

13.6 Residual Impacts

13.6.1 This section considers the temporary (construction) and permanent (operational) potential residual landscape effects of the Proposed Scheme on the LCAs, LLCAs, landscape features and landscape perceptual items as assessed in **section 13.5**. It sets out the residual effects, accounting for effects at operation phase years 15-25. Effects are adverse unless otherwise stated. Through the environmentally led design process, embedded mitigation has been developed and is reflected in the Proposed Scheme, as summarised in **Table 13-17**. The proposed additional mitigation measures are set out in **section 13.5** and **Table 13-17**.

Temporary - Construction Phase

13.6.2 As detailed in **section 13.4**, **Table 13-12** and **Table Table 13-15**, the construction of the Proposed Scheme will result in unavoidable temporary **Substantial** or **Moderate** significant adverse effects on all of the LCAs (Drumochter Pass and Glen Truim: Upper Glen and Dalwhinnie and Glen Truim), all of the LLCAs (Dail a Chuirn, Tom A’ Bhacain, Dalwhinnie, Leacainn, Cuaich, Dallanach, Odharaich and Crubenmore), landscape features of landform, vegetation, woodland and water and on landscape perceptual feature of landscape experience. Even though such effects may be significant during the construction phase, as they are also temporary, they are not considered residually significant.

Permanent

13.6.3 **Section 13.5** identifies significant potential effects. Through mitigation detailed in **Table 13-17** and given the establishment of vegetation by years 15-25, it is anticipated that there are no significant residual effects when mitigation is in place and planting has established. There is also potential for beneficial effects on woodland.

13.6.4 The greatest effects in the long term are **Moderate/ slight** not significant effects upon the Glen Truim Upper Glen and Dalwhinnie LCA and the Dalwhinnie LCA. This is due to the notable changes at the Dalwhinnie Junction that will alter the characteristics of the LCA and LLCAs in this localised location. Over time the junction and planting design will integrate with the surrounding landscape.

13.6.5 **Table 13-18** sets out the summary of residual effects.

Table 13-18: Summary of residual effects on landscape character and features

Receptor	Sensitivity	Significance of Impact – Construction Phase	Significance of Impact – Operation Year 1	Mitigation Ref. (Table 13-17)	Residual Significance of Impact – Operation Years 15-25
Landscape Character Areas					
Drumochter Pass	Medium	Moderate	Moderate/ slight not significant	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV13, P08-LV14, P08-LV15	Slight
Glen Truim Upper Glen and Dalwhinnie	Medium	Moderate	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV13, LV14	Moderate/ slight not significant
Glen Truim	Medium	Moderate	Moderate/ slight not significant	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV13, P08-LV14, P08-LV15	Slight
Local Landscape Character Areas					
Dail A'Chuirn	Medium	Moderate	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV13, LV14	Negligible
Tom A'Bhacain	Medium	Moderate	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV13, P08-LV14, P08-LV15	Negligible
Dalwhinnie	High/ medium	Substantial	Substantial	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Moderate/ slight not significant
Leacainn	Medium	Moderate	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Negligible
Cuaich	High/ medium	Substantial	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Slight
Dallanach	High/ medium	Substantial/ Moderate	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV10, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Slight
Odharaich	Medium	Moderate	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV9, P08-LV10, P08-LV13, P08-LV14, P08-LV15	Slight
Crubenmore	Medium	Moderate	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV10, P08-LV11, P08-LV12, P08-LV13, P08-LV14, P08-LV15	Slight

Receptor	Sensitivity	Significance of Impact – Construction Phase	Significance of Impact – Operation Year 1	Mitigation Ref. (Table 13-17)	Residual Significance of Impact – Operation Years 15-25
Landscape Feature					
Landform	High	Substantial/ moderate	Moderate/ slight not significant	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV7, P08-LV10, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Slight/ negligible
Vegetation	Medium	Moderate	Moderate/ slight not significant	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV13, LV14	Slight
Woodland	High	Moderate	Moderate	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV14, P08-LV15	Slight with potential for beneficial effects
Wildness	High/ medium	Slight	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV13, P08-LV14, P08-LV15	Negligible
Water	Medium/ low	Moderate	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV7, P08-LV10, P08-LV11, P08-LV13, P08-LV14, P08-LV15	Negligible
Landscape Perception					
Historic and Cultural Associations	Medium	Moderate/ slight not significant	Slight	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV13, P08-LV14, P08-LV15	Negligible
Landscape Experience from the A9	High/ medium	Moderate	Moderate/ slight significant	SMC-LV1, SMC-LV2, SMC-LV3, SMC-LV4, SMC-LV5, SMC-LV6, SMC-LV7, P08-LV1, P08-LV2, P08-LV3, P08-LV4, P08-LV5, P08-LV6, P08-LV7, P08-LV8, P08-LV9, P08-LV10, P08-LV11, P08-LV12, P08-LV13, P08-LV14, P08-LV15	Slight

Summary

- 13.6.6 Significant adverse effects on the LCAs, LLCAs are anticipated at construction and often at Year 1 before most embedded and additional mitigation will be established. As noted above, with embedded (primary) and additional (secondary) mitigation in place, there are no residual significant effects on the LCAs, LLCAs, landscape features, CNPA SLQs, or the SLA.
- 13.6.7 The greatest effects in the long term are **Moderate/ slight not significant** effects upon the Glen Truim Upper Glen and Dalwhinnie LCA and the Dalwhinnie LCA. This is due to the notable changes at the Dalwhinnie Junction that will alter the characteristics of the LCA and LLCAs in this localised location. Over time the junction and planting design will integrate with the surrounding landscape.
- 13.6.8 Proposed planting, as detailed on the **Environmental Mitigation Drawings 6.1-6.11** in **Volume 3**, will provide a number of benefits, including improving biodiversity, improving the LLCAs and benefiting the CNPA SLQs.

13.7 References

- Alison Grant, Cairngorm National Park Landscape Character Assessment: Final Report, Published by CNPA 2009
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