

# Appendix A10.3: Special Landscape Qualities of the River Tay (Dunkeld) National Scenic Area



# 1.1 Introduction

- 1.1.1 This appendix provides an assessment of the effects of the proposed scheme upon the Special Qualities or Special Landscape Qualities (from this point, referred to as SLQs) of the River Tay (Dunkeld) National Scenic Area (NSA). Special landscape qualities are defined as the characteristics that individually, or combined, make a designated landscape special in terms of landscape and scenery (NatureScot, 2025). The SLQs have influenced the siting and design of the proposed scheme and the assessment of impacts on the SLQs has informed the development of appropriate mitigation proposals during the landscape and visual impact assessment at DMRB Stage 3. The proposed scheme description is provided in Chapter 6. Figure 6.1 shows the proposed scheme elements and Figure 10.6 illustrates the proposed landscape and ecological mitigation along it.
- 1.1.2 The SLQs have been identified through review of NatureScot's 'The Special Qualities of the National Scenic Areas: Scottish Natural Heritage Commissioned Report No.374' (Scottish Natural Heritage, 2010). This document defines the SLQs of each NSA in Scotland and expands upon each one. These NSA SLQs are presented by SNH (from this point, referred to as NatureScot due to a change of name) to clarify "what needs to be safeguarded to maintain its outstanding scenery" and to provide a "basis for future consultation and policy development, particularly in relation to managing development and land use change within NSAs."
- 1.1.3 The River Tay (Dunkeld) NSA covers the landscape surrounding the cathedral town of Dunkeld. It is characterised by beautiful woodlands and a fertile, lowland strath situated below the rugged hills of the Highland edge. At King's Seat/hillfort on the lower slopes of Craig a Barns, the narrow valley serves to act as a 'gateway' and transition point for travellers on the existing A9 as they journey from the landscapes of the lowlands to highland scenery.
- 1.1.4 An illustrative view of the NSA is shown in Image A10.3.1 and extracts from NatureScot's Commissioned Report No.374 including the details of the SLQs of the River Tay (Dunkeld) NSA are provided below.



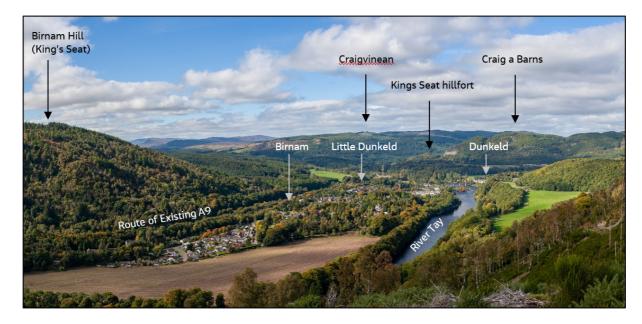


Image A10.3-1: Illustrative View of the River Tay (Dunkeld) NSA from Newtyle Hill

- 1.1.5 Between the Pass of Birnam and the Tay Crossing, the existing A9 lies wholly within the River Tay (Dunkeld) NSA (Figure 10.1). The NSA is characterised by its natural and semi-natural scenery and cultural influences, where the highland features of rivers, straths and haughlands are balanced with farmland, settlements and managed woodland over hills and across policies and designed landscapes. It includes the settlements of Dunkeld and Birnam (refer to Image A10.3.1) and extends north to parts of Craigvinean Forest and east to include the Loch of Lowes, Loch of Craiglush, and Loch of Butterstone. The nine Special Qualities (SLQs) of the NSA are identified in The Special Qualities of the National Scenic Areas, Scottish Natural Heritage Commissioned Report No.374 (2010) as follows:
  - SLQ1. The beauty of cultural landscapes accompanying natural grandeur;
  - SLQ2. The 'Gateway to the Highlands';
  - SLQ3. Characterful rivers, waterfalls and kettle-hole lochs;
  - SLQ4. Exceptionally rich, varied and beautiful woodlands;
  - SLQ5. The picturesque cathedral town of Dunkeld;
  - SLQ6. Drama of The Falls of Braan and The Hermitage;
  - SLQ7. Dunkeld House policies;
  - SLQ8. Significant specimen trees; and
  - SLQ9. The iconic view from King's Seat.

#### SLQ1. The beauty of cultural landscapes accompanying natural grandeur

Appreciation of this area's scenery goes back at least as far as the 18th century, when it was seen as a 'sublime' landscape, combining the qualities of power, vastness, light, colour, sound and loudness, and remoteness.



The area is now an extensive cultural landscape of managed policies, designed landscapes, compact settlements, farmland and forest.

The balance, variety and composition of these cultural features accompany, and often utilise, the natural grandeur of the surrounding highlands, straths, rivers, and haughlands. It is a delicate balance that relies on a blend of both cultural beauty and majestic natural scenery.

Even stretches of the apparently natural rivers and waters were modified in the late 18th century. This harnessed water power to service the flourishing linen industry. Many stretches of the River Tay's banks have been enhanced with tree planting, access and fishing stations.



Image A10.3-2: View of the landscape near Dunkeld & Birnam golf course



Image A10.3-3: View looking south from Dunkeld Bridge towards Dunkeld and Little Dunkeld War Memorial



#### SLQ2. The 'Gateway to the Highlands'

Dunkeld has for long been lauded and visited as the 'Gateway to the Highlands', where lowland scenery changes to highland and both can be appreciated, often in the same view.

Strath Tay is at its narrowest here, with the river curving around under the crags of Craig a Barns to the north, and rocky Birnam Hill, with its old slate quarries, to the south. The wide and smooth-flowing River Tay has a lowland appearance, whereas the River Braan, whose confluence is opposite Dunkeld, presents a highland alternative.

This transition from highland to lowland is especially marked in winter, when snow covered summits are the backcloth to a low-lying mosaic of green and brown.

Nowadays this 'gateway feel' is experienced when travelling north on the A9 trunk road, descending the hill to Dunkeld, then rounding the corner to behold vistas opening-up of Strath Tay and the Highland hills behind.



Image A10.3-4: View from the existing A9 looking north-west on approach to Dunkeld

#### SLQ3. Characterful rivers, waterfalls and kettle-hole lochs

The rivers, falls and lochs vary greatly, with different water bodies adding different interest, experiences and atmosphere to the scene. The River Tay meanders in great loops of deep shining peaty water, the river gravelly rather than rocky and with alternating long pools and swift glides. In contrast the River Braan's course has spectacular turbulent and tumbling rapids and waterfalls as it forces its way through a deep gorge.

Contrasts between the characters of these two rivers were intentionally and consciously exploited in the Hermitage and Dunkeld designed landscapes. Walks led through from the broad, quiet course of the Tay at Inver, into the narrow, craggy valley of the swift, rushing waters of the Braan.

Other contrasts lie further east, where the Highland foothills that extend from Dunkeld to Rattray are cut by the Lunan Burn, a small, fast flowing highland burn arising in the Mounth Highlands north of Dunkeld. It forms a steep gorge as it descends through the hills.



As the burn flows eastwards forming the Lunan valley, so the area is peppered with tranquil lochans of varying size. These have all formed in a series of kettle-holes; three lie closely together in the east of the NSA, Loch of Lowes, Loch of Craiglush and Loch of Butterstone.



Image A10.3-5: View of River Tay looking east from Dunkeld Bridge



Image A10.3-6: View of River Tay looking west from Dunkeld Bridge



#### SLQ4. Exceptionally rich, varied and beautiful woodlands

The NSA is richly afforested and wooded. The tree-cover varies widely with different tree species, management history and age structure, which creates exceptional variety. However, key to this variety are the areas of open field and pasture that provide an important setting for the woods and enable longer views to be possible.

The smaller areas of natural and semi- natural woodlands contrast with the extensive managed forests planted in the great 18th century forestry expansion, centred principally in this area. The Dukes of Atholl pioneered large-scale forestry and from 1738 to 1830 planted some 27 million conifers – 'for beauty and profit' – around Dunkeld.

The Hermitage woodland, originally planted in the 18th century, is now largely mixed conifers of Scots pine, Douglas fir and Norway spruce.

Craigvinean Forest is the greatest of the plantations. This was originally planted mainly with larch, but now the lower slopes have a mixed woodland of Scots pine and beech, while the upper slopes are mixed conifers including the third generation of larch.

On the opposite banks of the Tay are the Craig a Barns and Crieff Hill policy woodlands.

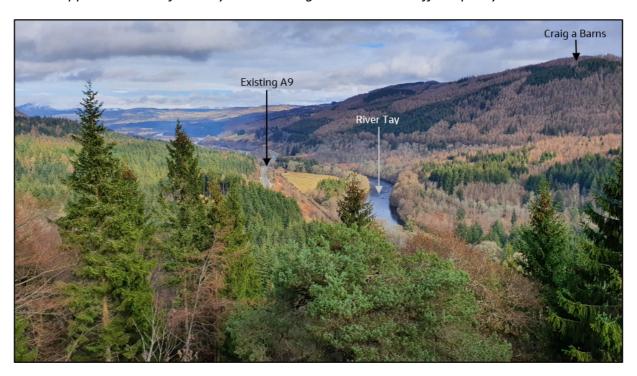


Image A10.3-7: View looking north from Pinecone Viewpoint in Craigvinean Forest

#### SLQ5. The picturesque cathedral town of Dunkeld

At the NSA's centre is the compact and picturesque cathedral town of Dunkeld, nestling in the hills on the Tay's north haughlands, connected by Telford's old stone bridge to the Victorian railway resort of Birnam with its distinctive station.

It is of special cultural and historic significance being strategically placed on a major north-south route to the Highlands crossing an east-west route leading through from Strath Braan to the Lunan Valley.



It has been a major ecclesiastical centre from the 7th century and then in the 9th century, Kenneth MacAlpin, the first King of Scots, made Dunkeld head of the Church in Scotia and the capital of the newly-formed nation created by the union of the Scots and the Picts.

It was a market town set at the junction of cattle-droving roads and a crossing point on the Tay; poor communication and transport links were improved in 1809 when the ferry across the Tay between Dunkeld and Birnam was replaced by a bridge built by Thomas Telford.

Dunkeld's compact built form, its integrity, its domestic scale, its close relationship to the River Tay and its beautiful setting results in a town of great charm and character. This, together with its historical sites, makes it popular with tourists.

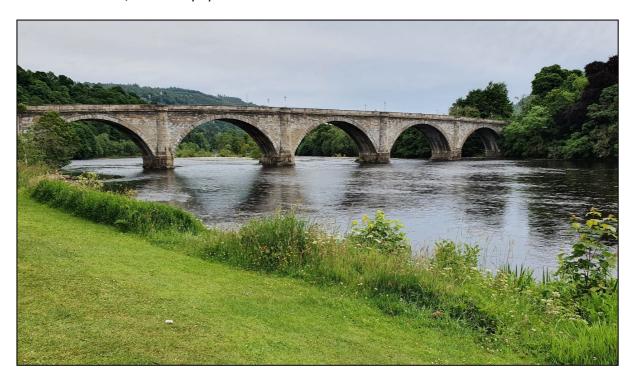


Image A10.3-8: View looking east of Dunkeld Bridge from Cathedral Lawn



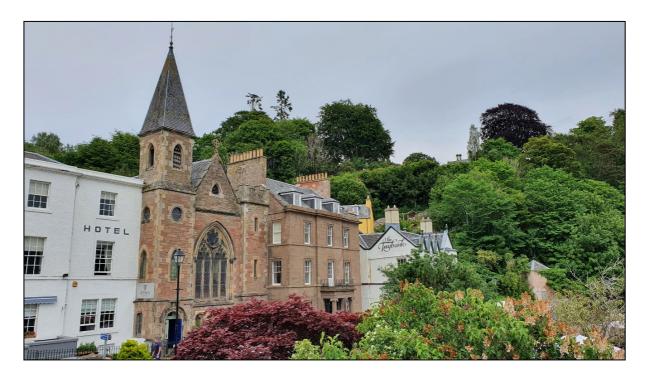


Image A10.3-9: View of Dunkeld townscape looking north from Bridge Street

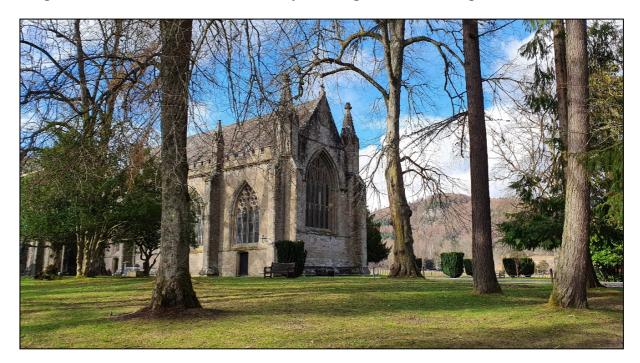


Image A10.3-10: Dunkeld Cathedral grounds

# SLQ6. Drama of The Falls of Braan and The Hermitage

The height of scenic drama is met below Inver, where the River Braan falls, tumbling through the picturesque gorge of The Hermitage into the Tay.



The Hermitage is of outstanding cultural significance, exploiting the wild nature of the waterfall in giving visitors experience and enjoyment of it.

The natural riverside landscape is dramatic, with the roaring sound heard from woodland walks north of the river. Long distance views are limited as woodlands provide the main structure. However, this is intentional to guide movement through the landscape and, by its presence or absence, hide or reveal 'surprises' such as Ossian's Hall, Hermitage Bridge and Ossian's Cave.



Image A10.3-11: Falls of Braan

## **SLQ7. Dunkeld House policies**

The Dunkeld House designed landscape makes up a major portion of the NSA, along the riverside from Dunkeld westwards and northwards. It forms a significant extent of designed and managed ornamental planting and walks.



Within this the River Tay is an important component, its banks laid out with walks and the remnants of ornamental planting, principally the fine trees which survive from the mid-19th century American Garden.

It is a place that exploits the dominant views on each side of the Tay and Braan to the coniferous woodlands and mountains beyond.



Image A10.3-12: View from the riverside Bishop's & Fiddler's Path in autumn

#### SLQ8. Significant specimen trees

There are trees of a great age, known individually for their historic, or even legendary, significance and associations: The Birnam Oak, Niel Gow's Oak, the Parent Larch and the Hermitage's Douglas Fir.

Many significant ornamental tree groups add to the visual variety and managed countryside character. These form avenues along some of the walks, and tree-lines along stretches of the river, such as the Bishop's Walk which extends around the beeches on Bishop's Hill to the Cathedral Lawn.





Image A10.3-13: Birnam Oak (estimated to be at least 600 years old)

### SLQ9. The iconic view from King's Seat.

Standing proudly on the edge of the Highland boundary fault line, King's Seat, the summit of Birnam Hill is an iconic Scottish viewpoint.

To the north is a panorama of the hills and glens of the Highlands, to the south the fertile fields of the Lowlands. Eastwards there are views along the boundary fault, across Loch of the Lowes to the fertile farmland of Strathmore. Westwards, the Perthshire hills lead the eye into the far distance.

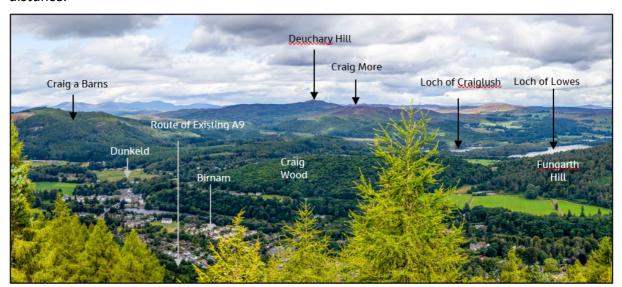


Image A10.3-14: View looking north from Birnam Hill (rocky outcrop adjacent to Core Path DUNK/11)



# 1.2 Assessment Methodology

- 1.2.1 The 'four steps of the assessment process' in *Special Landscape Qualities Guidance on assessing effects* prepared by NatureScot, the Cairngorm National Park Authority and the Loch Lomond and Trossachs National Park Authority in 2025 have been followed to assess effects on the SLQs.
- 1.2.2 Locations where the landscape characteristics underpin the SLQs have been identified and assessed, mitigation measures which are proposed are outlined and an assessment made as to whether impacts associated with the proposed scheme would present a significant risk to the defining qualities of the SLQs.
- 1.2.3 Judgements on the significance of effects on SLQs consider the assessed sensitivity of the resource (based on a combination of value and susceptibility), the magnitude of impact, the nature of the effects, the potential to avoid or mitigate the effect and limitations to carrying out mitigation. Refer to Chapter 10 Tables 10.1, 10.2, 10.4, 10.5 and 10.6 for the criteria used for assessing susceptibility, value, sensitivity, magnitude of impact and significance of effect.
- 1.2.4 All NSAs along with their individual SLQs are judged to be of high value, as reflected by their national designation.
- 1.2.5 Susceptibility is defined by the GLVIA3 as 'the ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.' 'An internationally, nationally or locally valued landscape does not automatically, or by definition, have high susceptibility to all types of change' (GLVIA3 para 5.46). The susceptibility of each SLQ to the proposed development within each landscape character unit has been assessed on an individual basis.
- 1.2.6 The table below provides an assessment of impacts and effects on the SLQs of the four LLCAs and one LCT which would be affected by the proposed scheme. For the purposes of this assessment, effects are considered adverse unless otherwise stated.
- 1.2.7 With regards to SLQ8: Significant Specimen Trees, the authors have taken an approach that specimen trees comprise either locally famous trees mentioned in tourist and heritage literature, or trees identified as A Category or veteran trees during the arboricultural survey undertaken as part of this EIAR.

## 1.3 Assessment Process

#### Step 1 – Review and Description of the Proposed Scheme

1.3.1 The proposed scheme comprises widening of an 8.4km section of single carriageway road to a dual carriageway with two lanes in either direction, separated by a central reserve. It includes a new grade separated junction south of Birnam, a new at grade roundabout with street lighting at Dunkeld Junction and a grade separated junction at Dalguise.



#### 1.3.2 Proposed new structures include:

- a bridge under the A9 to provide a new access to Murthly Estate from the B897;
- a bridge carrying the A9 over the realigned B867/ Perth Road at the new Birnam Junction;
- a new WCH underpass with lift and stair access to Dunkeld & Birnam Station Platforms 1 and 2, including buildings on the platforms to house the lift apparatus and stairs;
- natural stone retaining walls flanking the new station underpass entrance and along the north side of the new station car park;
- a bridge under the A9 over the Inchewan Burn and the road from Birnam to Birnam Glen;
- a retaining wall along the north bound side of the A9 between Birnam Glen and Dunkeld Junction Roundabout;
- A retaining wall alongside the realigned A822 south of Dunkeld Junction Roundabout;
- a bridge carrying the A9 across the River Braan (including lighting of the access track WCH route under the bridge) with a section of retaining wall returning westwards to retain a section of the southbound carriageway and avoid earthworks within the floodplain;
- 14 flood relief culverts underneath the dualled A9 with openings in the retaining wall on the southbound side, daylighting in the embankment on the northbound side;
- a retaining wall alongside the River Braan to retain the diverted path between the Hermitage and Inver;
- extensions to the existing railway bridges under the A9 west of Inver and south of the Tay crossing;
- a bridge to carry the dualled A9 across the realigned B898 and NCR77 at Dalguise Junction;
   and
- a section of bridge on the southbound side of the existing Tay Crossing to carry the new southbound A9 carriageway and WCH route.
- 1.3.3 A new car park to replace the existing Dunkeld & Birnam Station car park is proposed in the area currently occupied by Birnam Industrial Park. The new car park would include street lighting (as does the existing industrial park).
- 1.3.4 The dualling requires large-scale earthworks including cuttings, (likely to be into rock at Birnam Junction and on the northbound approach to Dalguise Junction) and embankments.
- 1.3.5 The proposed scheme includes several SuDS features including basins, wetlands and ponds.
- 1.3.6 As much of the existing A9 corridor is wooded, the proposed scheme requires the removal of woodland including mixed roadside planting, dating back to when the current route was opened in 1977, mature conifer plantation including forestry at Murthly Estate, Inver Wood and east of the route north of the Tay Crossing, and several areas of native AWI woodland including at Birnam Junction and to the west of the River Braan Crossing. Riparian tree along the River Braan and the Tay would also be removed to facilitate construction of the new bridge crossings.



1.3.7 Further description of the components of the proposed scheme is provided in Section 6.4 of EIAR Chapter 6 - The Proposed Scheme and the effects of these components on landscape and visual amenity are discussed in Chapter 10 - Landscape and Chapter 11 - Visual.

#### Step 2 – SLQs that may be affected by the Proposed Scheme

1.3.8 The study area for the assessment of effects on SLQs has been informed by the extents of the NSA (shown on Figure 10.1), a detailed desk-based study, including Zone of Theoretical Visibility (ZTV) mapping (shown on Figure 11.2) and numerous site surveys. Given the scale and extents of the proposed scheme and its location within the NSA all nine of the SLQs (described above in Section 1.1) have been scoped into the assessment. Assessment locations which represent the range of places from where the relevant SLQs are experienced were also identified. Some of these assessment locations are included as viewpoint locations that are intended to be illustrative of the nature of the changes to views resulting from the proposed scheme (shown on Figures 11.5 to 11.14).

### Step 3 – Assessment of Effects on SLQs and Design Objectives

1.3.9 Table A10-3.1 includes an assessment of the effects of the proposed scheme on each of the NSA SLQs potentially affected, along with a list of the related SLQs with which they can be experienced, and details of mitigation Design Objectives. Consideration has also been given to how the Proposed Scheme design may conserve and enhance the SLQs.



Table A10.3-1: Assessment of Impacts and Effects on the Special Landscape Qualities of the River Tay (Dunkeld) NSA

Table A10.3-1: Assess		Liai Landscape Qualities of the River Ta	Table A10.3-1: Assessment of Impacts and Effects on the Special Landscape Qualities of the River Tay (Dunkeld) NSA				
Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)			
SLQ1: The beauty of cultural landscapes accompanying natural grandeur  Related SLQs: SLQs 2, 3, 4, 5, 6, 7, 8 and 9  Assessment Locations:  A9 corridor  Newtyle Hill (Figure 11.9)  Birnam Hill (Figures 11.6 and 11.7)  Pine Cone Viewpoint (Figure 11.14)  Dunkeld Cathedral (Figure 11.13)  Dunkeld Bridge  Murthly Castle Estate	<ul> <li>Lowland landscape in a scenic upland setting.</li> <li>Broad open strath with extensive floodplain along meandering River Tay.</li> <li>Settlements found on valley floor.</li> <li>Compact historic settlements framed by majestic natural scenery.</li> <li>Extensive and varied woodland.</li> <li>Designed and managed landscapes.</li> <li>Influenced by large estates, including Murthly.</li> <li>Broad floodplains, with meandering rivers and narrower, gorge-like sections interspersed across the glens.</li> <li>A mosaic of managed woodlands, farmland and small settlements framed by views of the uplands.</li> <li>The Dunkeld House policies.</li> <li>The landscape garden of the Hermitage, along the River Braan.</li> <li>Riverside walks, fishing stations and plantings.</li> <li>Dunkeld and Birnam golf course.</li> <li>Farmland found on the slopes and strath floor.</li> <li>Views of the cultural landscapes framed by wooded and rocky hills and higher summits.</li> <li>Riverside walks, planting and fishing stations.</li> <li>Dunkeld's 17th century townscape.</li> <li>Stanley Hill parkland.</li> <li>Category A-listed Dunkeld and</li> </ul>	The proposed scheme would increase the prominence of road infrastructure, structures and earthworks amongst the cultural and natural landscapes of the NSA.  The proposed scheme would impact the balance between woodland and open farmland along the existing A9 road corridor as a result of the road widening and introduction of associated Birnam, Dunkeld and Dalguise Junctions, widened bridges crossing the Rivers Braan and Tay, earthworks, SuDS features, culverts and mitigation planting (also impacting SLQs 2 and 4). The increased extents of engineered embankments in the landscape would interrupt the physical and visual flow of the river corridor and open, flat strath most notably around the Braan Crossing and Dalguise Junction. In addition, the introduction of the proposed Dunkeld & Birnam Station Replacement Car Park would impact on local townscape character.  Although the proposed scheme would potentially impact the balance of cultural landscapes and natural scenery by increasing the presence of man-made features within the NSA, it would not directly or indirectly affect most of the characteristics that underpin this SLQ. There would be relatively	<ul> <li>Design Objectives:         <ul> <li>Avoid/ reduce the visual impacts of the proposed scheme and traffic experienced from within the surrounding natural and cultural landscape (including Murthly, Dunkeld House and the Hermitage GDLs) and settlement, while maintaining controlled views of the surrounding landscape from the A9.</li> <li>Improve integration of the proposed scheme with Murthly Castle GDL, maintaining the largely wooded character of the road corridor incorporating modern design elements in keeping with the evolving landscape of the designation and avoiding the loss of important landscape features.</li> <li>Maintain a suitable balance between woodland and open space/farmland.</li> <li>Design of structures to respond to local context, using high quality materials and detailing.</li> <li>Improve connection between Dunkeld &amp; Birnam Station and Birnam/mitigate severance between the station and the town.</li> </ul> </li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures would help minimise the impacts on the balance of cultural landscapes and natural scenery:         <ul> <li>The grading of earthworks to reduce their artificial appearance where appropriate, but also use of engineered slopes and retaining structures to lessen the extents of the earthworks and reduce impacts on the existing landscape pattern, landform and extent of tree loss. Where rock cuttings are required, create rock formations with irregular faces of varied height, angle and form to reflect the structure of the local bedrock (Mitigation Item P02-LV8).</li> <li>Reinstatement of lost mixed woodland with a similar species composition would ensure that the characteristics of the SLQ are preserved (Mitigation Items P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19).</li> <li>Realignment of the Murthly Estate Western D</li></ul></li></ul>	No.  The proposed scheme would slightly increase the prominence of road infrastructure along the existing A9 road corridor. Following maturation of the proposed woodland planting there would not be any significant effects on the SLQ.  While there would be a greater influence of road infrastructure on the pattern of the cultural landscapes, the proposed scheme's alignment along the existing A9 road corridor combined with the suite of mitigation measures would mean limited impacts on the beauty and balance of cultural landscapes and natural scenery resulting from the proposed scheme in the long term.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight			
	Birnam station.	limited effects on views from					



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
	Value: High Susceptibility: Medium (due to existing A9 road corridor and some and ability to accommodate the proposed change albeit with consequences) Sensitivity: High (limited capacity to accommodate the proposed change)	riverside walks or designed landscapes and the proposed scheme would not alter the natural grandeur of the setting of the Dunkeld & Birnam settlement.  Predicted Magnitude of Impact: Moderate Predicted Effects: Moderate	<ul> <li>The retention and protection of existing woodland would be undertaken as far as practicable (Mitigation Item P02- LV13).</li> <li>Murthly Estate access bridge to be designed with arched form and in keeping with Murthly Castle GDL. The design of all structures to be informed by specialist aesthetic advice to reduce impacts on the SLQs. (Mitigation Item P02-LV12).</li> <li>The careful use of varied planting and seeding to reinstate woodland and grassland, to maintain and/or recreate the patchwork of open ground within the woodland, to integrate the proposed scheme into the landscape and to screen views of access tracks and the widened A9 from the north (including from Dunkeld House Hotel and riverside walks) (Mitigation Items P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19).</li> <li>The design of SuDS features and flood culverts to achieve a good landscape fit (located within areas of open ground where possible) and minimise visual impact (Mitigation Items P02-LV9 and P02-LV27).</li> <li>Maintaining some open views north-east towards Craig a Barns in views from the widened A9 between Dunkeld and Tay Crossing (Mitigation Item P02-LV21).</li> <li>Grubbing up disused sections of the roads and tracks and using severed field corners and landlocked areas for new planting as appropriate (Mitigation Item P02-LV18).</li> <li>Gateway to the Highlands landscape design incorporating land art and native tree and ground cover planting within Dunkeld Junction Roundabout, designed to frame views north towards the hills to the north. (Mitigation Item P02-LV26).</li> <li>The Compensatory Flood Storage Area will be returned to its former land cover/land use so that it blends in with the surrounding landscape. The use of retaining walls and 'hard' structures will be avoided and earthwork slopes slackened where practicable, to integrate with the surrounding landform (Mitigation Item P02-LV10).</li> <li>Where possible, earth bunding will be used to provide noise attenuation to reduce p</li></ul>	



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
			<ul> <li>Architectural and Townscape Design of new Pedestrian Underpass, Dunkeld &amp; Birnam Station Replacement Car Park and associated structures by a conservation architect (Mitigation Item P02-LV25).</li> </ul>	
SLQ2: The 'Gateway to the Highlands'  Related SLQs: SLQs 1, 4 and 8  Assessment Locations:  A9 corridor  River Tay paths  Dunkeld & Birnam Station  Station Road, Birnam (Figures 11.10 and 11.11)  Dunkeld  Newtyle Hill (Figure 11.9)  Birnam Hill (Figures 11.6 and 11.7)	<ul> <li>Tall evergreen roadside trees creating a sense of enclosure and of passing through a narrow 'gateway' opening to vistas, experienced by people travelling north on the A9 when approaching and passing Dunkeld.</li> <li>Backdrop of craggy Craig a Barns and wooded Birnam Hill, then Craig Vinean, on either side of the River Tay.</li> <li>Perception of Dunkeld as the 'Gateway to the Highlands'.</li> <li>Evidence of the Highland Boundary Fault where flatter broader lowlands transition to higher, craggier summits of the Highlands.</li> <li>Settled, riparian banks of the more lowland in character River Tay, connecting to the narrower gorge and falls of the more highland in character River Braan in the west.</li> <li>Rounded uplands of the Mounth Highlands in the east and higher craggier summits to the west.</li> <li>Value: High</li> <li>Susceptibility: High (this SLQ is unlikely to accommodate the proposed change without undue consequences)</li> <li>Sensitivity: High (limited capacity to accommodate the proposed change)</li> </ul>	The widening of the carriageway, introduction of the grade separated Birnam Junction and associated large-scale earthworks, loss of existing woodland (including some tall roadside trees which enclose sections of the road at the southern end of the proposed scheme) and changes to the pattern of the landscape would open up views to the surrounding hills and change how the 'Gateway' is experienced by users of the A9.  Generally, there would be a lessening of 'natural' enclosure of the dualled A9 by woodland (also impacting SLQs 1 and 4). Impacts would also result from the Dunkeld Junction roundabout which would interrupt the experience of the continuous passage through the strath when travelling north on the A9.  There would be some changes to the alignment of the roads leading in to the 'gateway' settlement of Dunkeld (the B867, A822 and A923) as a result of the proposed scheme.  The proposed scheme would not impact on the form of Strath Tay, the nature of the River Tay and River Braan, or the transition of the landscape from a lowland to a highland one.	<ul> <li>Design Objectives:</li> <li>Maintain the essentially wooded character of the road corridor with controlled views to the surrounding hills.</li> <li>Ensure delivery of a high quality design solution for Dunkeld &amp; Birnam Station befitting the "Gateway to the Highlands" and the cultural importance of the station and Birnam Conservation Area, improving the connection between the station and the town.</li> <li>Exploit the natural rock cutting at Birnam Junction to enhance the gateway experience.</li> <li>Use opportunity presented by the new Dunkeld Junction Roundabout to install a new 'gateway' design feature, while maintaining the view north to Craig a Barns.</li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures would help minimise the impacts on the 'Gateway to the Highlands':</li> <li>The retention of existing trees and vegetation wherever possible (Mitigation Item P02-LV13).</li> <li>Careful design of roadside mixed woodland planting. Careful species selection would partially help to recreate a sense of enclosure along parts of the route and maintain the sense of transition from the Lowland to the Highland landscapes (Mitigation Items P02-LV14, P02-LV15, P02-LV17, P02-LV19 and P02-LV21).</li> <li>Design of grade separated Birnam Junction to include an elegant, single span bridge structure, with exposed rock cuttings/built rock outcrops forming slopes beneath to create a new 'gateway' feature (Mitigation Item P02-LV24).</li> <li>Design of roadside planting to create a sequence of views of Dunkeld and the surrounding hills. This sequence would potentially enhance the views experienced by vehicle travellers on the A9, and their experience of the 'Gateway'. (Mitigation Items P02-LV14, P02-LV16, P02-LV17, P02-LV19 and P02-LV21).</li> <li>Architectural and Townscape Design of new Pedestrian Underpass, Dunkeld &amp; Birnam Station Replacement Car Park and associated str</li></ul>	Retention of views and maturation of the proposed replacement roadside planting would ensure that there would not be any significant effects on the SLQ in the longer term.  The proposed scheme would slightly alter the way the 'Gateway' is experienced by road users, primarily as a result of the widening of the carriageway, introduction of the grade separated Birnam Junction and the at-grade Dunkeld Junction roundabout. The proposed scheme would however remain broadly similar to the existing situation, but with opportunities to design/enhance the 'Gateway' experience as experienced by travellers on the A9.  There would be no or limited effects only on the accessibility of Dunkeld as a result of the proposed scheme.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
		Predicted Magnitude of Impact: Moderate Predicted Effects: Moderate	<ul> <li>As part of design-embedded mitigation, accessibility of Dunkeld as the 'Gateway to the Highlands' would be maintained via the proposed atgrade Dunkeld Junction roundabout.</li> <li>Gateway to the Highlands landscape design incorporating land art and native tree and ground cover planting within Dunkeld Junction roundabout, designed to frame views north towards the hills to the north. (Mitigation Item P02-LV26).</li> <li>Utilising opportunities for enhancement of the local landscape character and/or visual amenity where this can be achieved within the Scottish Minister's Land (Mitigation Item P02-LV28).</li> </ul>	
Assessment Locations:  River Tay and River Braan paths  Dunkeld Bridge  Dunkeld Cathedral (Figure 11.13)	<ul> <li>Broad open strath with extensive floodplain along meandering River Tay.</li> <li>Narrower and turbulent River Braan and Littleton Burn, enclosed by riparian woodland, falling into River Tay.</li> <li>The contrasting scale and character of these watercourses adds interest to the area.</li> <li>Value: High</li> <li>Susceptibility: Medium (due to existing A9 road corridor and the ability of this SLQ to accommodate the proposed change albeit with some consequences)</li> <li>Sensitivity: High (limited capacity to accommodate the proposed change)</li> </ul>	The proposed scheme would require a widened crossing at the River Tay and a replacement crossing of the River Braan as a result of the dualling of the A9, however, there would be no new crossings.  Views from riverside walks would be impacted by the localised loss of woodland and increased prominence of road infrastructure, structures and earthworks associated with the widening of the A9.  The proposed SuDS features would add new water features to the area which would potentially appear artificial and uncharacteristic of the landscape (also impacting SLQ 1).  The proposed scheme would not significantly impact the character of the River Tay or River Braan, both of which are currently crossed by the A9.	<ul> <li>Design Objectives:         <ul> <li>Design of river (Braan and Tay) crossings and associated structures to minimise impacts experienced from the river corridors. Use planting to 'soften' and help integrate river crossings and to screen views of the A9 and associated traffic from river corridors.</li> <li>Integration of SuDS into the landscape.</li> </ul> </li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures would help to minimise the impacts on this SLQ:         <ul> <li>Earthworks proposals to minimise the impact of cuttings and embankment slopes and to allow integration of the road with surrounding land (Mitigation Item P02-LV8).</li> <li>The careful design of SuDS and culverts to achieve a good landscape fit and minimise visual impact (Mitigation Items P02-LV9 and P02-LV27).</li> <li>The design of structures informed by specialist aesthetic advice in order to reduce impacts on the SLQs (Mitigation Items P02-LV12 and P02-LV24).</li> <li>The retention of existing trees and vegetation wherever possible and incorporation with new planting proposals would be undertaken as far as practicable (Mitigation Item P02-LV13).</li> <li>Planting to replace trees lost during construction would reinstate woodland screening of road infrastructure from riverside walks (Mitigation Items P02-LV14, P02-LV16, P02-LV17, P02-LV18 and P02-LV19).</li> </ul> </li> </ul>	There would be no effects on the character of the River Braan and the River Tay.  The careful design of the widened crossings and maturation of the replacement planting would ensure the experience of this SLQ from the riverside walks would not be significantly affected by the proposed scheme in the longer term.  The naturalistic design of the SuDS features, and associated planting, would reduce the potential impact of these new waterbodies on this SLQ and help integrate them into the landscape.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight
		Predicted Magnitude of Impact: Moderate		



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
The Hermitage/ Falls of Braan		Predicted Effects: Moderate		
SLQ4: Exceptionally rich, varied and beautiful woodlands  Related SLQs: SLQs 1, 2, 6, 7, 8 and 9)  Assessment Locations:  A9 corridor  Birnam Hill (Figures 11.6 and 11.7)  Newtyle Hill (Figure 11.9)  Pine Cone Viewpoint (Figure 11.14)  Murthly Castle GDL  Dunkeld House GDL  The Hermitage GDL	<ul> <li>Farmland found on slopes and valley floor.</li> <li>Extensive and varied woodland.</li> <li>Craigvinean Forest, one of Scotland's oldest managed forests, created by the 3<sup>rd</sup> Duke of Atholl in the 18<sup>th</sup> century with larch seed brought from the Alps, comprising mostly mixed conifers such as larch and Scots pine but also beech; part of Tay Forest Park.</li> <li>Northeastern part of Craigvinean Forest plantation comprising mostly mixed conifers such as larch and Scots pine but also beech.</li> <li>Young mixed scrub woodland along the existing A9 road corridor dating back to 1980s.</li> <li>Riparian woodland along the River Tay.</li> <li>Murthly Castle Garden and Designed Landscape (GDL) woodlands.</li> <li>Dunkeld House GDL policy woodlands.</li> <li>The Hermitage GDL woodland.</li> <li>Craig a Barns and Crieff Hill policy woodlands.</li> <li>Site of Birnam Wood dating back to medieval times and carrying cultural associations (it was mentioned in Shakespeare's <i>Macbeth</i>).</li> <li>Value: High</li> <li>Susceptibility: Medium (due to existing A9 road corridor and the</li> </ul>	The proposed scheme would result in the loss and fragmentation of existing woodland (including areas of mixed woodland, AWI woodland, coniferous plantation, scrub and riparian woodland) along the length of the existing A9 road corridor (also impacting SLQs 1, 2 and 9).  Non-native species which add to the diversity of the woodlands within the NSA would be impacted within the Murthly Castle GDL, and around Inver Wood within Craigvinean Forest where the Dalguise Junction is proposed. The introduction of SuDS would involve loss of small areas of existing riparian woodland.  There would be no or very limited loss of woodland within The Hermitage GDL and there would be no impacts on the policy woodlands of Dunkeld House, Craig a Barns and Crieff Hill.  In consideration of the large extent of woodlands within the NSA, there would be limited impacts on their contribution to the character of the strath.  Predicted Magnitude of Impact: Moderate  Predicted Effects: Moderate	<ul> <li>Design Objectives:</li> <li>Minimise loss of woodland and protect existing trees as far as practicable.</li> <li>Minimise loss of valuable AWI woodland.</li> <li>Offset losses of AWI woodland with new native species-rich woodland planting.</li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures proposed for this area would help reduce the impacts on this SLQ:</li> <li>The retention and protection of existing woodland would be undertaken as far as practicable. (Mitigation Item P02-LV13).</li> <li>Areas of woodland loss would be reinstated with replacement planting and/or the planting of species which would increase the diversity and richness of the woodlands. This approach would be particularly appropriate where areas of plantation are required to be removed. Native species would generally be used in areas of new tree planting to maintain and enhance the richness and variety of the woodlands (Mitigation Items P02-LV14, P02-LV15, P02-LV19 and P02-LV21).</li> <li>In addition to woodland planting, open areas would be maintained along the length of the route corridors os that views of the woodlands from the A9 would be maintained (Mitigation Item P02-LV21).</li> <li>The use of engineered slopes and retaining walls where appropriate would lessen impacts upon existing woodlands (Mitigation Item P02-LV8) and the reinstatement of lost mixed woodland with a similar species composition would ensure that the qualities of the SLQ are preserved (Mitigation Items P02-LV14, P02-LV15 and P02-LV19).</li> <li>Individual tree and scrub planting (Mitigation Items P02-LV14, P02-LV15, P02-LV17 and P02-LV19) as well as species -rich grassland seeding (Mitigation Item P02-LV19) as well as species -rich grassland seeding (Mitigation Item P02-LV19) as reposed as replacement for the vegetation lost as a result of the proposed scheme.</li> </ul>	Following maturation of the proposed woodland planting there would not be any significant effects on the SLQ.  While the amount of woodland along the length of the road corridor would be likely to be reduced, through careful species selection the richness, variety and beauty of the woodlands would be largely maintained, particularly in the longer term when the mitigation planting has established. The majority of woodland throughout the NSA would be unaffected by the proposed scheme and views of the woodlands would be maintained.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
	extensive nature of this SLQ within the NSA)  Sensitivity: High (limited capacity to accommodate the proposed change)			
SLQ5: The picturesque cathedral town of Dunkeld  Related SLQs: SLQs 1 and 7  Assessment Locations:  Dunkeld & Birnam Station  Station Road, Birnam (Figures 11.10 and 11.11)  Dunkeld Cathedral (Figure 11.13)  Dunkeld Bridge  Dunkeld House GDL  River Tay and River Braan paths  War Memorial	<ul> <li>The picturesque remains of the Dunkeld Cathedral and the atmospheric Cathedral grounds.</li> <li>The River Tay and wider landscape setting contribute to the scenic quality of the townscape.</li> <li>Key views from the Cathedral Lawn and DUNK/145 riverside walk (Bishop's &amp; Fiddler's Paths).</li> <li>Telford's old stone bridge.</li> <li>The distinctive Victorian railway station and resort of Birnam.</li> <li>Compact built form, close relationship to the River Tay and its setting.</li> <li>Key views from the Cathedral policies, Telford bridge and the riverside walks.</li> <li>Value: High</li> <li>Susceptibility: High (this SLQ is unlikely to accommodate the proposed change without undue consequences)</li> <li>Sensitivity: High (limited capacity to accommodate the proposed change)</li> </ul>	There would be no direct impacts on the cathedral town of Dunkeld.  The proposed widened and elevated crossing of the River Braan would replace the existing crossing in views from the north. The new bridge structure, the associated embankments, localised change in landform and loss of existing riparian woodland and scrub would result in a change to a limited section of the wide view from the Cathedral Lawn (also impacting SLQs 1 and 7).  There would also be filtered views, particularly in wintertime, of the new embankments, retaining structures, flood relief culverts, compensatory flood storage area and the resultant loss of existing woodland, along the proposed scheme west of the River Braan crossing, increasing the prominence of road infrastructure in views from the north (also impacting SLQs 1 and 7).  The war memorial atop a raised mound in Little Dunkeld would be maintained, although a small number of existing roadside trees at the bottom of the knoll would be removed due to the proposed realignment of the A923. While the	<ul> <li>Design Objectives:         <ul> <li>Avoid impacts on the historic townscape of Dunkeld and Birnam.</li> <li>Screen views of the A9 and traffic from Dunkeld and Birnam.</li> <li>Ensure delivery of a high quality design solution for Dunkeld and Birnam Station befitting the "Gateway to the Highlands" and the cultural importance of the station and Birnam Conservation Area, improving the connection between the station and the town.</li> </ul> </li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures proposed for this area would help reduce the impacts on this SLQ:         <ul> <li>Retention and protection of existing woodland as far as practicable (Mitigation Item P02- LV13) combined with woodland and individual trees as mitigation planting to screen the proposed scheme in views from the town (Mitigation Items P02-LV8, P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19).</li> <li>Particular attention on aesthetics in the detailed design of the new widened bridge crossing over the River Braan as well as retaining structures (Mitigation Item P02-LV12).</li> <li>A large area of 'naturalistic' riparian woodland planting proposed to the west of the River Braan crossing to screen and assimilate the proposed flood culverts and Compensatory Flood Storage Area into the surrounding landscape (Mitigation Item P02-LV10, P02-LV14, P02-LV15, P02-LV16, P02-LV17, P02-LV18, P02-LV19 and P02-LV27).</li> <li>Stone faced retaining wall with 2m stone parapet to screen traffic from Birnam but allowing views of Dunkeld &amp; Birnam Station buildings from along Station Road (Mitigation Items P02-LV08 and P02-LV12).</li> <li>Architectural and Townscape Design of new Pedestrian Underpass, Dunkeld &amp; Birnam Station Replacement Car Park and associated structures by a conservation architect (Mitigation Item P02-LV25).</li></ul></li></ul>	There would be no direct effects on Dunkeld as a result of the proposed scheme.  There would be impacts on views from the town towards its wider setting, particularly from Dunkeld Bridge and Dunkeld Cathedral Grounds. These impacts would be reduced as mitigation planting, including extensive riparian woodland planting west of the Braan Crossing and feature planting at the proposed Dunkeld Junction Roundabout, establishes and integrates the proposed scheme into the wider landscape.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
		arrangement of routes entering the town would be altered by the proposed scheme, access would be maintained. There would be an increase in the prominence of road infrastructure, including earthworks, signage and lighting, in views south from the Dunkeld Bridge due to the road widening and the introduction of the Dunkeld Junction Roundabout (also impacting SLQ 1).  It is likely that there would be impacts on the wider setting of Dunkeld which would generally be experienced in views from riverside walks (refer to Chapter 11 Visual).  Predicted Magnitude of Impact: Moderate  Predicted Effects: Moderate	<ul> <li>Avoidance of excessive, unnecessary and obtrusive lighting through the appropriate selection, location and arrangement of lighting elements to achieve the necessary safety standards of useful light, while minimising intrusiveness in the form of spillage, glare and reflection (Mitigation Item P02-LV22).</li> </ul>	
SLQ6: Drama of The Falls of Braan and The Hermitage  Related SLQs: SLQs 1, 3, 4 and 8  Assessment Locations:  Hermitage GDL car park  Hermitage GDL	<ul> <li>A carefully designed sensory experience in a secluded valley setting, recognised as a designed landscape of national significance.</li> <li>Riverside woodland walks through towering Douglas firs, a picturesque gorge and a roaring waterfall (Black Linn Falls).</li> <li>Intentionally restricted views to guide visitor movement through the landscape using sound and to reveal surprises such as Ossian's Hall folly, the ancient Hermitage Bridge and Ossian's Cave.</li> <li>Experienced from core paths</li> </ul>	There would be no direct impacts on the Falls of Braan.  There would be limited impacts on views from the woodland walks close to the river due to the enclosure of the footpaths (related to SLQ 3). There would be no impacts on the movement of people and their experience of the design features such as Ossian's Hall. There would be no impacts on views of the Falls of Braan.	<ul> <li>Design Objectives:</li> <li>Maintain a visual buffer of woodland between the A9 and the Falls of Braan and Hermitage GDL.</li> <li>Mitigation would include:</li> <li>New mixed woodland planting at the entrance to the Hermitage (Mitigation Items P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19).</li> <li>The retention and protection of existing woodland would be undertaken as far as practicable. (Mitigation Item P02-LV13).</li> </ul>	No.  Impacts on the SLQ are likely to be relatively minor. Establishment of mitigation planting at the entrance to the Hermitage would reduce impacts in the longer term.  Predicted Magnitude of Impact: Negligible Predicted Effects: Neutral
Falls of Braan	DUNK/22, DUNK/64 and DUNK/15.  Value: High	The new alignment would be north of the existing A9 increasing the separation between the Hermitage carpark and the road and allowing		



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
SLQ7: Dunkeld House policies	Susceptibility: Low (due to existing A9 road corridor and ability to accommodate the proposed change with little to no consequences)  Sensitivity: Medium (some capacity to accommodate the proposed change without undue detriment)  An 18 <sup>th</sup> and 19 <sup>th</sup> -century designed 'picturesque' landscape of	for an increased buffer of woodland. The new junction from the A9 may require felling of a small number of trees.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight  There would be no direct impacts on Dunkeld House policies as a result of	Design Objectives:  Maximise planted visual buffer between the A9 and the Dunkeld House	No.
Related SLQs: SLQs 1, 4 and 8  Assessment Locations:  Dunkeld Bridge  Dunkeld House GDL  River Tay and River Braan paths  Pine Cone Viewpoint (Figure 11.14)	considerable size and outstanding historical value due to its associations with the Dukes of Atholl; includes Serbian Spruce Grove, Redwood Grove, and mid-19th century American Garden comprising large specimens of spruce and fir trees.  Dunkeld House including the Terraced Walled Garden on the north bank of the River Tay at the western end of the policies.  Stanley Hill, a modified natural mound, wooded and terraced in the formal style.  The River Tay setting and the riverside walks including core path DUNK/145 (Bishop's & Fiddler's Paths: Bishop's Hill to north of A9 bridge over River Tay) and core path DUNK/25 (Bishop's & Fiddlers Paths: A923 at car park via Bishop's Hill to Dunkeld House Hotel driveway).  King's Seat ancient hill fort and a number of follies including Lady Charlotte's Cave and the Rocking Stone on Craig a Barns Hill.  Views into the policies from the A923, north of Dunkeld, and from the King's Pass minor road.	However, views of the wider landscape from footpaths within the policies (including those by the River Tay) would be impacted by the proposed scheme. This would include filtered views of the proposed retaining structure, embankments, flood relief culverts, compensatory flood storage area and the resultant loss of existing woodland along the proposed scheme west of the Braan Crossing. (also impacting SLQs 1 and 4). There would also be filtered views of the earthworks proposed west of Inver (ch5400) and the large-scale retaining structure at ch5800 where the proposed scheme crosses the Highland Main Line railway.  As existing intervening woodland screening would be retained along the southern bank of the River Tay, glimpses of the proposed scheme would only be likely in winter when the trees are not in leaf.  Predicted Magnitude of Impact: Moderate	<ul> <li>Design of structures visible from the policies to be carefully considered to blend in with their surroundings and minimise visual intrusion.</li> <li>Mitigation would comprise:</li> <li>Retention of existing trees and vegetation wherever possible and incorporation with new planting proposals (Mitigation Item P02-LV13).</li> <li>The grading of earthworks where possible to reduce their artificial appearance and improve their integration with adjacent landform (Mitigation Item P02-LV8).</li> <li>The design of structures informed by specialist aesthetic advice in order to reduce impacts on the SLQs (Mitigation Item P02-LV12).</li> <li>The careful use of planting to integrate the proposed scheme into the landscape and reduce its visibility and influence in views from footpaths within the Dunkeld House policies (Mitigation Items P02-LV14, P02-LV16, P02-LV17, P02-LV18 and P02-LV19).</li> <li>A large area of 'naturalistic' riparian woodland planting proposed to the west of the River Braan crossing to screen and assimilate the proposed flood culverts and Compensatory Flood Storage Area into the surrounding landscape (Mitigation Item P02-LV10, P02-LV14, P02-LV15, P02-LV16, P02-LV17, P02-LV18, P02-LV19 and P02-LV27).</li> </ul>	There would be no direct impacts on Dunkeld House policies. Predicted impacts on visual amenity would be largely imperceptible following the establishment of the mitigation planting.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
SI OS: Significant	Value: High Susceptibility: High (this SLQ in this LLCA is unlikely to accommodate the proposed change without undue consequences) Sensitivity: High (limited capacity to accommodate the proposed change)  The avenue associated with the	Predicted Effects: Moderate	Dosign Objectives	No
SLQ8: Significant specimen trees  Related SLQs: SLQs 1, 2, 4 and 7  Assessment Locations:  A9 corridor  Murthly Castle GDL  River Tay and River Braan paths  Dunkeld Cathedral Grounds (Figure 11.13)  The Hermitage GDL  Dunkeld House GDL	<ul> <li>The avenue associated with the western drive to Murthly Castle.</li> <li>The Birnam Oak, said to be at least 600 years old and the last surviving tree from Birnam Wood, made famous in Shakespeare's Macbeth.</li> <li>The 300-year-old Birnam Sycamore neighbouring The Birnam Oak.</li> <li>Nieil Gow's Oak on the southern bank of the River Tay, west of Inver and north of the Hermitage car park.</li> <li>A towering stand of Douglas firs near Ossian's Hall at the Hermitage, which is also the site of Britain's third tallest tree, the 'Hermitage Douglas Fir' (64.5m tall) which fell across the River Braan in January 2017.</li> <li>Pedestal Larch and Grand Fir within Dunkeld House Estate.</li> <li>Several fine specimens of yew, hemlock, larch and fir within Dunkeld Cathedral grounds.</li> <li>The Parent Larch, immediately west of Dunkeld Cathedral, is the sole survivor from a group of</li> </ul>	sections of the line of trees associated with the Western Drive to Murthly Castle (planted along the section of the Western Drive diverted when the A9 was constructed along its current alignment) would be required to be felled as a result of the proposed scheme. (also impacting SLQs 2 and 4). Although these are not 'specimen trees' in the same category as the Birnam Oak, Niel Gow's Oak or the Parent Larch, their presence contributes to experience of people travelling on the A9.  Existing cedar avenue trees further along the western drive to Murthly Castle are to be protected and retained.  The following A Category trees would require removal as a result of the proposed scheme (also impacting SLQ 4):  a European beech and two conifers ca. ch7750;  a pedunculate oak ca. ch7580;	<ul> <li>Avoid impacts on significant Specimen Trees and their setting where possible.</li> <li>New native woodland tree planting with the potential for future development into specimen trees.</li> <li>Realignment of Murthly Estate Western Drive (severed by the existing A9) to create a new tree lined avenue.</li> <li>In addition to the Standard Mitigation Commitments (SMCs) (Mitigation Items SMC-LV1 to SMC-LV7), the following project specific mitigation measures would help to minimise the impacts on significant specimen trees:</li> <li>The retention of existing trees and vegetation wherever possible and incorporation with new planting proposals (Mitigation Item P02-LV13).</li> <li>The establishment of mixed woodland planting to compensate for the loss of existing woodland along the A9 road corridor and to help integrate the scheme into the landscape (Mitigation Items P02-LV14, P02-LV15, P02-LV17 and P02-LV19).</li> <li>Realignment of the Murthly Estate Western Drive and planting of new avenue of heavy standard trees within a widened verge to provide a continuation of the remaining section of historic cedar avenue, reinforce the historic landscape pattern and strengthen the landscape structure of the Murthly Estate. (Mitigation Item P02-LV23).</li> <li>Planting to reinstate woodland edge along the widened A9 to the south of Niel Gow's Oak using appropriate species would screen views to the new A9 embankment from the north (Mitigation Items P02-LV14, P02-LV15, P02-LV17, P02-LV18 and P02-LV19).</li> </ul>	There would be no significant impact on the SLQ.  Following the establishment and maturation of the proposed mitigation planting, utilising an appropriate species mix, there would be no significant impacts on the SLQ.  The establishment of a new avenue trees along the realigned Murthly Estate Western Drive as a continuation of the remnants of the original cedar avenue would restore its integrity.  There would be no impacts on other significant ornamental tree groups.  Predicted Magnitude of Impact: Minor Predicted Effects: Slight
	larches planted as seedlings over 250 years ago.  Several other A Category or Veteran trees.	<ul> <li>a sycamore ca. ch7320;</li> <li>three pedunculate oaks ca. ch7050;</li> <li>a grand fir ca. ch5600;</li> </ul>		



	cape characteristics that pin SLQs and Sensitivity sment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
accommodition with no sense to accommodition with no sense to accommodition accommodit	High potibility: High (limited ability to amodate the proposed change o undue consequences) asitivity: High (limited capacity accommodate the proposed inge)	<ul> <li>two grand firs ca. ch5520;</li> <li>a pedunculate oak ca. ch5270;</li> <li>two European beech ca. ch5050;</li> <li>a pedunculate oak ca. ch4830;</li> <li>a pedunculate oak ca. ch4520;</li> <li>a pedunculate oak ca. ch4520;</li> <li>a pedunculate oak ca. ch4250;</li> <li>two sweet chestnuts ca. ch2400;</li> <li>two pedunculate oak ca. ch2130; and</li> <li>two European beech ca. ch1800.</li> </ul> The following A Category tree would be at risk as a result of the proposed scheme: <ul> <li>a European beech ca. ch1800.</li> </ul> The following veteran trees would require removal as a result of the proposed scheme (also impacting SLQ 4): <ul> <li>a European beech and a pedunculate oak ca. ch7820;</li> <li>an Atlantic cedar ca. ch4960;</li> <li>a pedunculate oak ca. ch4780; and</li> <li>a European beech ca. ch4680.</li> </ul> The proposed scheme would also impact the setting of Niel Gow's Oak as a result of the widening of the A9 and formation of new earthworks (ch5300 to ch5600) and SuDS feature (ch5600) onto the floodplain which would lead to the loss of existing A9 roadside trees (also impacting SLQs 1 and 4).		



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
		Predicted Magnitude of Impact: Moderate Predicted Effects: Moderate		
SLQ9: The iconic view from King's Seat  Related SLQs: SLQs 1, 3 and 4  Assessment Locations:  A9 corridor  Birnam Hill path network (Figures 11.6 and 11.7)	<ul> <li>Scenic views from partly open ground at Birnam Hill summit where not screened by the tall conifer trees (mainly larch and pine).</li> <li>Views to the north, towards the hills and glens of the Highlands.</li> <li>Views to the south and east towards fertile farmland.</li> <li>Views to the west towards Perthshire hills including Schiehallion (on a clear day).</li> <li>Views northwards looking down towards Dunkeld and Birnam, and ahead towards Fungarth Hill, Craig Wood, Loch of Lowes and Loch of Craiglush, Craig More, Deuchary Hill and Craig a Barns as well as the Highland Hills in the far distance are available from a rocky outcrop (adjacent to Core Path DUNK/11) on the northern slopes of Birnam Hill about halfway down from the summit (see Image A10.3.14 above).</li> <li>Value: High</li> <li>Susceptibility: Low (due to existing A9 road corridor and the ability of this SLQ to accommodate the proposed change with little to no consequences)</li> <li>Sensitivity: Medium (some capacity to accommodate the proposed change without undue detriment)</li> </ul>	There would be no direct impact to the view from King's Seat as a result of the proposed scheme.  The ZTV indicates, and site visits confirmed, that visibility of the proposed scheme would be limited from the Birnam Hill summit cairn due to visual screening provided by intervening landform and tall dense conifers.  Filtered views of the roundabout and open views of a short section of the proposed scheme south of Little Dunkeld (ch3500 to ch3700) would, however, be available from the popular rocky outcrop viewpoint (adjacent to Core Path DUNK/11) on the northern slopes of Birnam Hill, approximately 650m from the King's Seat. Some views of the proposed scheme looking south-east (around Dalpowie Plantation and Byres Wood, approximately ch900 to ch-576) would also be available from Core Path DUNK/14 on the southern slopes of Birnam Hill.  The change in these views would occur due to the loss of existing roadside woodland and greater visibility of the road infrastructure, structures and earthworks (also impacting SLQs 1 and 4).	<ul> <li>Design Objectives:         <ul> <li>Minimise the visual impact of the A9 and traffic on the view.</li> </ul> </li> <li>Mitigation would comprise:         <ul> <li>Retention of existing trees and vegetation where possible, combined with planting of mixed woodland along the road corridor to help integrate the proposed scheme into the landscape and reduce its prominence in the wider landscape (Mitigation Items P02-LV13, P02-LV14, P02-LV17 and P02-LV19).</li> <li>Engineered slopes or retaining walls where appropriate would lessen impacts upon existing woodland areas (Mitigation Item P02-LV8) and the planting of woodland with a similar species composition and grading of earthworks (where possible) would ensure that the nature of views experienced from the King's Seat would be reinstated over time. (Mitigation Items P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19).</li> </ul> </li> <li>Special attention would be given to minimising the landscape and visual impacts of the proposed lighting columns and fixings at Dunkeld Junction roundabout and to prevent unnecessary glare or light spill (Mitigation Item P02-LV22).</li> </ul>	Following the grading out of earthworks and maturation of proposed woodland planting, there would not be any significant impact on the SLQ.  The proposed scheme would be visible in a relatively narrow field of view within the strath landscape and in the context of the expansive and panoramic views available from Birnam Hill. The widening of the A9 would be a relatively minor element in the overall view.  Predicted Magnitude of Impact: Negligible Predicted Effects: Neutral



Special Landscape Quality	Landscape characteristics that underpin SLQs and Sensitivity Assessment	Impacts of the proposed scheme on landscape characteristics and the effects on SLQs (Winter of the Year of Opening)	Design Objectives and Proposed Mitigation Measures	Significant Risk to landscape characteristics and the effects on SLQs post Mitigation? (Summer 15 Years after Opening)
		These elements would be visible towards the bottom of each of these views (and in the context of the existing road corridor), while the main focus of these views is, arguably, on the layers of hills in the near and far distance. The impacts would be slightly more pronounced in winter given the deciduous nature of the intervening larch.		
		Indirect effects resulting from the introduction of lighting columns at Dunkeld Junction roundabout (ch4100) would be discernible from King's Seat at night-time (also impacting SLQ 1).  Predicted Magnitude of Impact:		
		Minor Predicted Effects: Slight		



# 1.4 Summary of Significance of Effects on SLQs

- 1.4.1 The proposed scheme is predicted to have significant (**Moderate**) residual effects during the winter of the year of opening on SLQs 1, 2, 3, 4, 5, 7 and 8. However, in the summer 15 years after opening, following establishment of the proposed mitigation planting, residual effects on these SLQs would reduce to not significant (Slight).
- 1.4.2 While the proposed scheme is predicted to result in a number of slight adverse effects on the SLQs in the summer 15 years after opening, the cumulative impact of these is unlikely to erode the integrity of the NSA, given the proposed scheme comprises widening of an existing trunk road along with a suite of carefully designed project-specific mitigation measures.
- 1.4.3 Where adverse effects are expected to arise, in the longer term, it is anticipated that the mitigation associated with the proposed scheme would reduce them, particularly following the establishment and maturation of the proposed planting and the management of open spaces.

# 1.5 References

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