

Appendix A10.4: Assessment of Residual Indirect Effects on Landscape Character



1.1 Introduction

1.1.1 This appendix provides an assessment of the residual effects on the Landscape Character units which would not be physically affected by the proposed scheme but would potentially experience indirect, perceptual impacts on their defining elements and features as a result of the operation of the proposed scheme.

1.2 Assessment of Residual Indirect Effects

1.2.1 A description of the perceived effects on the landscape character units (in this instance NatureScot Landscape Character Types (LCTs)) is provided below in Table A10.4-1, the assessment having been informed by Zone of Theoretical Visibility (ZTV) mapping. The extent of theoretical visibility of the proposed scheme in a 'bare-earth' scenario (i.e. without screening from built elements and existing and proposed planting) on which this assessment is based is shown on Figure 10.5.



Table A10.4-1: Assessment of Residual Indirect Effects on Landscape Character Types

Sensitivity	Construction and Winter, Year of Opening			Summary of Mitigation Proposals	Summer, 15 Years after Opening			
	Description of Residual Effects	Magnitude of Impact	Significance of Effect		Description of Residual Effects	Magnitude of Impact	Significance of Effect	
Foothills – T	ayside LCT							
Medium to High	Analysis of the ZTV indicates that theoretical visibility of the construction operations and proposed scheme would occur from locations along the south-western fringe of the LCT between approximately 1.25km and 3km from the proposed scheme, including higher ground on the north side of Strath Tay, and also a small, more distant, partially forested elevated location at the eastern edge of the 5km study area. The A9 currently exerts a perceptual influence which would increase slightly due to the widening of the carriageway, the formation of new junctions, SuDS features and their associated access tracks, the proposed new River Braan Bridge and River Braan Flood Relief Culverts, compensatory flood storage area, road lighting at Dunkeld Junction Roundabout, signage, all associated earthworks and the resultant loss of existing roadside woodland.	Construction: Minor Operation: Negligible	Construction: Slight Operation: Slight	Construction phase Standard Mitigation Commitments (Mitigation Items SMC-LV1 to SMC-LV7). Retention of existing trees and vegetation wherever possible and incorporation with new planting proposals. Introduction of roadside planting along the road corridor to help integrate the proposed scheme into the landscape. The proposed tree species used would be similar to those along the existing road corridor which would facilitate integration of new planting into the wider landscape (Mitigation Items P02-LV13, P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19). Impact of cuttings and embankment slopes on existing woodland minimised by slope design or retaining structures. Treatment of soil nailed slopes to reduce visual impacts with soft-faced slopes fully vegetated and hard-faced slopes given aesthetic design consideration to aid landscape fit. (Mitigation Item P02-LV8). A 'naturalistic' design approach to SuDS features with associated riparian woodland and wet grassland, to promote biodiversity and improve integration into the receiving landscape (Mitigation Item P02-LV9). Where practicable compensatory flood storage areas will be returned to their former land cover/land use so that they blend in with the surrounding landscape (Mitigation Item P02-LV10). Sensitive design of structures such as bridges, underpasses and retaining walls to fit with the receiving landscape character (Mitigation Item P02-LV12). Special attention given to minimising the landscape and visual impacts of the lighting columns and fixings and to prevent unnecessary glare or light spill. Light Emitting Diodes (LEDs) or similar providing a directional light source with minimal light spillage would be used. The levels of lighting would be	Establishment of the mitigation planting would reduce the visual influence of the proposed scheme on the LCA. It would also help to integrate the proposed scheme into the wider landscape. As such, the significance of effects would reduce, reducing further with maturation of the mitigation planting.	Negligible	Slight	



				controlled to achieve the optimum balance between road safety and the impact of road lighting (Mitigation Item P02-LV22).			
Mid Upland	Glens LCT						
Medium to High	Analysis of the ZTV indicates that theoretical visibility of construction operations and the proposed scheme would occur from locations in the north-eastern part of the LCT on the valley slopes of the River Braan within approximately 2-2.5km of the proposed scheme. The A9 currently exerts a small perceptual influence on the LCT that would increase slightly due to the widening of the carriageway and the formation of new junctions, SuDS features and their associated access tracks, the proposed new River Braan Bridge and River Braan Flood Relief Culverts, compensatory flood storage area, all associated earthworks and the resultant loss of existing roadside woodland. However, most of the area within the ZTV is forested, so actual visibility towards the A9 corridor is very limited.	Construction: Minor Operation: Negligible	Construction: Slight Operation: Neutral	Construction phase Standard Mitigation Commitments (Mitigation Items SMC-LV1 to SMC-LV7). Retention of existing trees and vegetation wherever possible and incorporation with new planting proposals. Introduction of roadside planting along the road corridor to help integrate the proposed scheme into the landscape. The proposed tree species used would be similar to those along the existing road corridor to facilitate integration of new planting into the wider landscape (Mitigation Items P02-LV13, P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19). Impact of cuttings and embankment slopes on existing woodland minimised by slope design or retaining structures. Treatment of soil nailed slopes to reduce visual impacts with soft-faced slopes fully vegetated and hard-faced slopes given aesthetic design consideration to aid landscape fit. (Mitigation Item P02-LV8). A 'naturalistic' design approach to SuDS features with associated riparian woodland and wet grassland, to promote biodiversity and improve integration into the receiving landscape (Mitigation Item P02-LV9). Where practicable compensatory flood storage areas will be returned to their former land cover/land use so that they blend in with the surrounding landscape (Mitigation Item P02-LV10). Sensitive design of structures such as bridges, underpasses and retaining walls to fit with the receiving landscape character (Mitigation Item P02-LV12). Special attention given to minimising the landscape and visual impacts of the lighting columns and fixings and to prevent unnecessary glare or light spill. Light Emitting Diodes (LEDs) or similar providing a directional light source with minimal light spillage would be used. The levels of lighting would be controlled to achieve the optimum balance between road	Establishment of the mitigation planting would reduce the visual influence of the proposed scheme on the LCA. It would also help to integrate the proposed scheme into the wider landscape. As such, the significance of effects would reduce, reducing further with maturation of the mitigation planting.	Negligible	Slight



				safety and the impact of road lighting (Mitigation Item P02-LV22).					
Transitional Moorland and Forest LCT									
High	There are three separate areas of this LCT within the 5km study area. Analysis of the ZTV indicates that theoretical visibility of construction operations and the proposed scheme would potentially occur from a number of locations across the 5km study area within this upland LCT including: **to the southwest of the A9 corridor:** **the northeastern slopes of Birnam Hill including King's Seat* **the northern slopes of Torchuaig Hill and the eastern slopes of Little Trochry Hill in Strath Braan* **the northern slopes of Obney Hills and Craig Gibbon* **within the Tay Forest Park to the west and northwest of the A9 corridor:* **the eastern slopes of Creag Dubh and Creag Bheag* **the summit and eastern slopes of Creag an Uamhaidh and Creag an	Construction: Minor Operation: Minor	Construction: Slight Operation: Slight	Construction phase Standard Mitigation Commitments (Mitigation Items SMC-LV1 to SMC-LV7). Retention of existing trees and vegetation wherever possible and incorporation with new planting proposals. Introduction of roadside planting along the road corridor to help integrate the proposed scheme into the landscape. The proposed tree species used would be similar to those along the existing road corridor to facilitate integration of new planting into the wider landscape (Mitigation Items P02-LV13, P02-LV14, P02-LV15, P02-LV16, P02-LV17 and P02-LV19). Impact of cuttings and embankment slopes on existing woodland minimised by slope design or retaining structures. Treatment of soil nailed slopes to reduce visual impacts with soft-faced slopes fully vegetated and hard-faced slopes given aesthetic design consideration to aid landscape fit. (Mitigation Item P02-LV8). A 'naturalistic' design approach to SuDS features with associated riparian woodland and wet grassland, to promote biodiversity and improve integration into the receiving landscape (Mitigation Item P02-LV9).	Establishment of the mitigation planting would reduce the visual influence of the proposed scheme on the LCA. It would also help to integrate the proposed scheme into the wider landscape. As such, the significance of effects would reduce, reducing further with maturation of the mitigation planting.	Minor	Slight		
	 to the north and east of the A9 corridor: the summit and southern and western slopes of Deuchary Hill, Craig More and Crieff Hill the south-eastern slopes of Craig a Barns and high ground to its north A significant proportion of this LCT within the 			Where practicable compensatory flood storage areas will be returned to their former land cover/land use so that they blend in with the surrounding landscape (Mitigation Item P02-LV10). Sensitive design of structures such as bridges, underpasses and retaining walls to fit with the receiving landscape character (Mitigation Item P02-LV12). Special attention given to minimising the landscape and visual					
	ZTV is forested, limiting visibility of the A9 corridor. The A9 currently exerts a perceptual influence on the LCT which would increase slightly due to the widening of the carriageway and the formation of new junctions, retaining structures, flood relief culverts, compensatory flood storage area, SuDS features and their associated access			impacts of the lighting columns and fixings and to prevent unnecessary glare or light spill. Light Emitting Diodes (LEDs) or similar providing a directional light source with minimal light spillage would be used. The levels of lighting would be controlled to achieve the optimum balance between road safety and the impact of road lighting (Mitigation Item P02-LV22).					

A9 Dualling Programme: Pass of Birnam to Tay Crossing
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tracks, the proposed new bridge structures			
crossing the Rivers Braan and Tay, all			
associated earthworks and the resultant loss			
of existing roadside woodland.			

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1.3 References

NatureScot (2019), Landscape Character Assessment in Scotland web page and Landscape Character Types Map and Descriptions. Available at: https://www.nature.scot/professional-advice/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions (Accessed February 2025)