

## 20 Cumulative Impacts

### 20.1 Introduction

20.1.1 This chapter presents the assessment of potential cumulative impacts associated with the Proposed Scheme, which is described in **Chapter 5**. The requirement for an assessment of cumulative impacts is set out in EIA Directive (85/33/EEC), which along with amendments was codified by Directive 2011/92/EU, which was further amended in 2014 by Directive 2014/52/EU.

20.1.2 It is recognised that during the operation of the A9 Dualling Programme (Perth to Inverness) cumulative impacts may arise due to a change in traffic volume; these effects are considered in the relevant **Chapters 8 to 18** and not reported in this cumulative assessment.

20.1.3 It is acknowledged, that if construction of the Proposed Scheme overlaps with construction on other A9 Dualling Projects, there is potential for a significant cumulative impact relating to driver stress for drivers making the journey through several A9 projects (e.g. from Perth to Inverness). This potential impact would result from reduced speed limits, further lack of overtaking opportunities, journey delays and potential limited access to lay-bys; all of which have potential to increase driver frustration. Where practicable, phasing of the A9 dualling construction works will aim to limit disruption to road users which will reduce the likelihood of a significant cumulative impact on driver stress.

20.1.4 This chapter considers:

- The combined effect of a number of individual impacts arising as a result of the Proposed Scheme on a single sensitive receptor/ resource (Type 1 cumulative impacts)
- The combined effects of the Proposed Scheme with other reasonably foreseeable development schemes on a single sensitive receptor/ resource (Type 2 cumulative impacts)

#### Scope and Guidance

20.1.5 Design Manual for Roads and Bridges (DMRB) HA218/08 ‘Glossary of Terms Used in DMRB Volume 11, Sections 1 and 2’ (Highways Agency et al., 2008) refers to the European Commission (EC) ‘Guidelines for the Assessment of Indirect and Cumulative Impacts and Impacts Interactions’ (EC, 1999) for a common definition of cumulative impacts. It is this definition that has been applied in the methodology used for this EIA:

*“Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project.”*

20.1.6 DMRB, HA218/08 confirms that:

*“a cumulative impact may arise as the result of:*

- a) the combined impact of a number of different environmental topic-specific impacts from a single environmental impact assessment project on a single receptor/ resource*
- b) the combined impact of a number of different projects within the vicinity (in combination with the environmental impact assessment project) on a single receptor/ resource”.*

### Type 1 Cumulative Impacts

20.1.7 An assessment was undertaken of the potential for cumulative impacts on individual resources and receptors resulting from residual impacts from the Proposed Scheme, based on the topic-specific assessments presented in **Chapters 8-18**.

20.1.8 In the absence of an established methodology for assessing effect interactions that lead to Type 1 effects, but with cognisance of the ‘*EC Guidelines for the Assessment of Indirect and Cumulative Impacts and Impact Interactions*’ (1999) and the descriptive checklist approach, a two-step process was followed as set out below.

#### *Step 1: Review of Residual Impacts*

20.1.9 The primary focus was upon significant residual impacts, however, the potential for a combination of minor (non-significant) residual impacts to result in a significant cumulative impact on an identified resource or receptor has also been considered.

20.1.10 The significant residual impacts are identified in the individual topic assessments, as set out in **Chapters 8-18**.

20.1.11 Where there was potential for interaction with other topic areas and subsequent identification of potential combined effects at sensitive receptors, cumulative impacts were considered. Where the same sensitive receptor has been identified, in relation to two or more individual topics, this receptor was considered further at Step 2.

#### *Step 2: Consideration of Resultant Combined Effects*

20.1.12 Consideration was then given to the potential for resultant combined effects during the construction and/ or operation of the Proposed Scheme. This focused on the potential sensitive receptors for combined effects identified in Step 1.

20.1.13 The relevant residual inter-topic effects were then grouped together, and the potential for significant combined effects upon the receptors was assessed. Supporting commentary is provided in the impact assessment in **Section 20.2**. Professional judgement was used to determine whether or not the effects were considered to be significant or not.

### Type 2 Cumulative Impacts

20.1.14 The potential for cumulative impacts from the Proposed Scheme in combination with other reasonably foreseeable projects and developments (Type 2 cumulative impacts) was carried out at two levels:

- Level 1: a high-level appraisal of potential inter-project (i.e. A9 Dualling Programme Projects) cumulative impacts
- Level 2: a high-level appraisal of potential cumulative impacts with other reasonably foreseeable developments, within a 500m study area either side of the existing A9 (the selection of a 500m study area for the localised assessment was based on professional judgement, and was extended where necessary, on a case by case basis, to account for any notable developments just beyond the 500m study area)

20.1.15 A three-step process was undertaken to identify potential cumulative impacts:

*Step 1: Identification of ‘Reasonably Foreseeable’ Developments*

- 20.1.16 In accordance with the DMRB, ‘reasonably foreseeable’ is interpreted to include other projects that are ‘committed’ including:
- Trunk road and motorway projects which have been committed or confirmed (i.e. have been through the statutory processes). For the purpose of this assessment, this included committed projects within the A9 Perth to Inverness Dualling Programme. Note however, that outwith material demand and waste issues, some A9 Projects can be scoped out due to geographic/ topographic separation and distance (for example Project 3 is unlikely to result in direct cumulative impacts in combination with Project 09)
  - Development projects with valid planning permissions as granted by the local planning authority, and for which formal EIA is a requirement or for which non-statutory EIA has been undertaken. This was also expanded where applicable to include developments in the planning system which have yet to be determined.
- 20.1.17 A review of other major developments beyond those that are ‘committed’ has also been undertaken to ascertain whether any should justifiably be included in the assessment, by virtue of their scale, location or timing.
- 20.1.18 Following consultation with the relevant local planning authority/ authorities, a full list of developments to be considered in the Type 2 Cumulative Impacts Assessment was prepared, as set out in **Table 20-4**.

*Step 2: Consideration of Potentially Significant Cumulative Impacts from ‘Reasonably Foreseeable’ Developments*

- 20.1.19 Once the full list of developments had been identified and agreed, professional judgement was used to ‘scope out’ any of the developments that were not considered likely to have in combination significant cumulative impacts; for example, based on location, type of development, or development status. This allowed the assessment to focus on those that may potentially result in significant cumulative impacts in combination with the Proposed Scheme.

*Step 3: Assessment of Type 2 Cumulative Impacts*

- 20.1.20 A systematic, topic by topic, consideration of potential Type 2 cumulative impacts was then carried out. Professional judgement was used to determine whether or not the effects were considered to be significant.

**Limitations to Assessment**

- 20.1.21 In the absence of detailed construction phasing information for all of the A9 Dualling projects, the Type 2 cumulative impacts assessment relied upon extrapolation of information provided in the published Transport Scotland ‘Project Level Programme for Design and Development Work’ (Transport Scotland, 2014). As such, construction of A9 Dualling projects is expected between 2019 and 2025.
- 20.1.22 Local Development Plan land allocations were not considered within the Type 2 cumulative impacts assessment unless part of live or consented planning applications.
- 20.1.23 It has not been possible to undertake a detailed quantitative assessment of the cumulative impacts of the Proposed Scheme on material demand, waste and embodied carbon, as quantified information across all A9 Dualling schemes was not available, at the time of writing.

## 20.2 Combined Impacts of the Scheme (Type 1)

- 20.2.1 The potential for combined impacts on one receptor/ resource has been assessed in relation to the topic-specific residual impacts identified in **Chapters 8-18**.
- 20.2.2 It is acknowledged that multiple non-significant impacts can combine to result in a significant cumulative impact. Therefore, the assessment of cumulative impacts does take into consideration all reported residual impacts regardless of significance. However, particular consideration has been given to residual impacts that remain significant after proposed mitigation is implemented, as these are considered most likely to contribute to significant cumulative impacts. It was also recognised that it is possible to have multiple significant residual impacts (as reported for each environmental parameter) which, in combination, do not constitute an *additional* significant cumulative impact.
- 20.2.3 Following implementation of mitigation, there are few significant residual impacts within the context of the scale of the Proposed Scheme and the high sensitivity of parts of the surrounding area. The Proposed Scheme consists mainly of online widening, which limits the area of land required and means that the existing A9 trunk road is included in the baseline conditions.
- 20.2.4 Impacts on Cultural Heritage (**Chapter 15**) and All Travellers (**Chapter 9**) were not included in the assessment of Type 1 cumulative impacts, as these chapters already consider other environmental parameters when determining significance of an impact. For example, the assessment of setting for cultural heritage receptors considers proximity, land-take, landscape, visual and noise impacts. Likewise, All Travellers considers impacts on journey length, amenity value, access and visual impacts as well as driver stress, which takes account of predicted road and traffic conditions on road users.

### *Construction Stage Impacts*

- 20.2.5 Outline details on Proposed Scheme related construction activities and programme are provided in **Chapter 5**. However, the full construction programme will be completed by the appointed Contractor(s) based on detailed design and construction methodologies.
- 20.2.6 Residual adverse impacts in relation to construction stage visual effects, air quality, noise and vibration will be temporary and short-term in nature, i.e. related to the construction period only. However, given that the scheme-wide construction period is estimated at up to 3.5 years, some receptors may be subject to disruption and disturbance for extended periods.
- 20.2.7 Properties closest to construction works are most likely to be subject to different types of temporary disturbance, including changes in air quality (e.g. dust deposition), visual amenity, noise and vibration as well as potential alterations in access to and from properties.
- 20.2.8 Given their proximity, Estates and holdings local to the Proposed Scheme will experience adverse construction stage effects. **Chapter 8** contains an in-combination assessment which considers effects on Agriculture, Sporting and Forestry interests. This includes disruption to operations, game and livestock avoidance, and access to and loss of land. The outcome is summarised below:
- Phoines Estate – Slight
  - Ralia Estate – **Moderate**
  - Ruthven Farm – Slight
  - Ruthven Park – **Substantial**
  - RSPB land – **Negligible/ Slight**
  - Church of Scotland land – **Substantial**
  - Davall Developments Ltd. – Slight
  - Laggan Croft No. 1 – **Substantial**
  - Laggan Croft No. 2 – **Moderate/ Substantial**
  - Balavil Estate – **Moderate**
  - Dunachton Estate – Slight

- 20.2.9 Further consideration of Type 1 cumulative effects at construction is not therefore applied to Estates and holdings to avoid potential for double counting.
- 20.2.10 There are a number of access points which serve both NMUs and local vehicular traffic directly off the existing A9. It is understood that some of these access points are critical to residential, commercial and general outdoor access within the study area, as discussed in more detail in **Chapter 8** and **Chapter 9**. During construction, suitable access to property and NMU routes shall be maintained by the Contractor; however, during certain construction operations, temporary closures or diversions may be required. Typically, vehicle access to residential and commercial properties in and around Newtonmore, Kingussie and Lynchat, including Ralia Café and Tourist Information, Invernahavon Holiday Park, individual holiday lets and B&Bs will experience a **Slight/ Moderate** impact to vehicle access (**Chapter 8**).
- 20.2.11 In terms of visual impacts (**Chapter 14**), views from 38 built receptor locations are assessed to be significantly impacted during construction. As these impacts are temporary, none were assessed as being residually significant, although they have still been considered in the assessment of cumulative impacts during construction.
- 20.2.12 In terms of commercial property receptors, Ralia Café and Tourist Information, 12 holiday cottages at Meadowside and Ptarmigan Lodge are likely to be affected by construction stage disruption sufficient to result in **Adverse** effects on business viability. Meadowside is not expected to be subject to other significant impacts during construction, however they will be affected by non-significant visual impacts and access restrictions. As such **no significant cumulative impacts** are considered likely for Meadowside.
- 20.2.13 Ralia Café and Tourist Information and Ptarmigan Lodge have been assessed as having significant visual impacts during construction. When considered in combination with the significant impact on business viability and non-significant impacts on access there is likely to be a **significant cumulative impact** on these receptors.
- 20.2.14 Mitigation has been proposed in the corresponding chapters to reduce these impacts where possible. Mitigation measures will be translated into the Construction Contract as Environmental Commitments and built into the Construction Environmental Management Plan (CEMP) along with a community liaison strategy, to ensure mitigation is implemented.
- 20.2.15 Overall, given the construction stage residual impacts reported in **Chapters 8-18**, and following the implementation of construction stage mitigation, the potential for significant Type 1 cumulative impacts is limited.

#### *Operational Stage Impacts*

- 20.2.16 A number of potentially significant residual impacts have been predicted for the operational phase of the Proposed Scheme, as identified in **Chapters 8-18**. Non-significant residual impacts have also been identified.
- 20.2.17 All residual impacts with the potential for combined effects on individual receptors are set out in **Table 20-1**. The table describes for each receptor both Step 1: Review of Residual Impacts and Step 2: Consideration of Resultant Combined Effects.
- 20.2.18 It is acknowledged that a number of properties that have been identified as receptors may belong to larger estates or farms. As such, all properties associated with estates or farms have been grouped together and included in the table, regardless of whether a cumulative impact is likely. Cumulative impacts on estates and farms are then assessed based on impacts to these properties as well as impacts on agricultural, sporting and forestry interests of the estates and farms.

Table 20-1: Potential Type 1 Cumulative Impacts during operation of the Proposed Scheme

Receptor	Description of individual Impacts	Cumulative Impact
<b>Properties within Ralia Estate</b>		
Inverton House	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impact north bound (NB) and significant (High) impact south bound (SB) on access from the A9 to Inverton house giving an overall significant <b>High</b> impact (Chapter 8: Community and Private Assets (C&amp;PA))</li> <li>Non-significant (Moderate) impact NB and non-significant (Negligible) impact SB on access to the A9 from Inverton house, giving an overall non-significant <b>Slight</b> impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/ Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Negligible</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The significant impact on access from the A9 in-combination with the non-significant impacts on noise, visual and access to the A9, are not expected to result in a significant cumulative impact.</p>	Not Significant
Milton of Nuide	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impact NB and significant (High) impact on SB access, from the A9 to Nuide Farm resulting in a significant <b>Moderate</b> impact on access. (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact on access both NB and SB to the A9 from Milton of Nuide (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> visual impacts due to the removal of some vegetation (Chapter 14: Visual)</li> <li>Non-significant <b>Slight/ Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>The combination of a significant impact on access (moderate), non-significant noise impacts (slight) and non-significant (moderate/ slight) visual impacts are not considered to present significant cumulative impacts.</p> <p>As replacement mitigation planting becomes established, the visual effect (moderate/ slight) will continue to reduce.</p>	Not Significant
Nuide Farm (Cottage and Farmland)	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impact NB and significant (High) impact on (SB) access from the A9 to Nuide Farm resulting in a significant <b>Moderate</b> impact on access (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact both NB and SB access to the A9 from Nuide Farm (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/ Moderate</b> visual impacts due to removal of some vegetation and visibility of new access track and SuDs basin (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There will be a significant impact to access from the A9 to Nuide Farm when travelling SB. There are also some non-significant noise and visual impacts identified. When considered in-combination, this is unlikely to result in a significant cumulative impact.</p>	Not Significant
Ptarmigan Lodge	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Slight) impact NB and non-significant (Negligible) impact SB on access from the A9 to Ptarmigan Lodge resulting in an overall non-significant <b>Negligible</b> impact. (Chapter 8: C&amp;PA).</li> <li>Non-significant (Negligible) impact NB and non-significant (Slight) impact SB on access to the A9 from Ptarmigan Lodge resulting in an overall non-significant <b>Slight</b> impact. (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> impact on business viability (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Moderate Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/ Negligible</b> visual impacts due to the removal of some vegetation (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There is some potential for cumulative impacts on Ptarmigan Lodge due to a combination of small/ slight impacts to air quality, visual and access, but with an improvement in road noise levels. When considered in-combination, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Ralia Beag	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact both NB and SB on access from the A9 to Ralia Beag (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) impact NB and significant (Moderate) impact SB on access to the A9 from Ralia Beag resulting in an overall <b>Slight</b> non-significant impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/ Moderate Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/ Negligible</b> visual impacts due to the removal of some vegetation (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There is some potential for cumulative impacts on Ralia Beag due to negligible/ slight impacts to visual and access and an improvement in road noise levels. When considered in-combination, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant
Ralia Lodge (House and Grounds)	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Slight</b> impact due to land-take (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) impact on NB and non-significant (Slight Beneficial) impact on SB access from the A9 to Ralia Lodge resulting in a <b>Slight Beneficial</b> Impact (Chapter 8: C&amp;PA)</li> <li>Non-significant (Slight Beneficial) impact on NB and non-significant (Negligible) impact on SB access to the A9 from Ralia Lodge resulting in a <b>Slight Beneficial</b> Impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/ Moderate</b> noise impact (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Negligible</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There is potential for cumulative impacts on Ralia Lodge due to residual impacts to air quality, noise, access, visual and land take. However, when considered in-combination, they are unlikely to result in a significant cumulative impact.</p>	Not Significant
Upper Nuide Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impact on NB and significant (High) impact on SB access, from the A9 to Upper Nuide Cottage giving an overall significant impact of <b>Moderate</b> (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact both NB and SB on access to the A9 from Upper Nuide Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/ Moderate</b> visual impacts due to the removal of some vegetation during construction (Chapter 14: Visual)</li> <li>Non-significant <b>Slight Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>There is potential for adverse cumulative impacts on Upper Nuide Cottage due to in combination effects of significant impacts on access and non-significant visual issues. However, given the beneficial noise impact and once replacement planting mitigation becomes established the cumulative impact is not considered to be significant.</p>	Not Significant
<b>Properties within Phoines Estate</b>		
Phoines Lodge	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant (Moderate) NB impact and non-significant (Slight) SB impact on access from the A9 to Phoines Lodge. In combination this results in a non-significant <b>Slight</b> impact. (Chapter 8: C&amp;PA)</li> <li>Non-Significant (Negligible) NB impact and significant (Moderate) SB impact on access to the A9 from Phoines Lodge. In combination this results in a significant <b>Moderate</b> impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> impact on business viability (Chapter 8: C&amp;PA)</li> </ul> <p><u>Step 2</u></p> <p>There is some potential for cumulative impacts on Phoines Lodge due to a moderate access impact, however when considered in-combination with a non-significant impact on business viability, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
<b>Properties within Balavil Estate</b>		
Balavil House	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impacts on NB and significant (Moderate) impacts on SB access from the A9 to Balavil House, giving an overall significant <b>Moderate</b> impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible Beneficial</b> on both SB and NB access to the A9 from Balavil House (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/Moderate</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>Balavil House will experience a significant impact to SB access from the A9. When considered in-combination with, non-significant impacts on other access, noise, visual and air quality, it is unlikely to result in a significant cumulative impact.</p>	Not Significant
East Lodge	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Slight/Moderate</b> impacts on community severance due to access restrictions (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Negligible</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, non-significant impacts on community severance, noise, visual and air quality are unlikely to result in a significant cumulative impact.</p>	Not Significant
Lynvoan Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant (Negligible) impact NB and non-significant (Slight Beneficial) impact SB to access from the A9 to Lynvoan Cottage resulting in an overall significance of <b>Slight Beneficial</b> (Chapter 8: C&amp;PA)</li> <li>Non-significant (Slight) impact to NB and non-significant (Negligible) impacts SB access to the A9 from Lynvoan Cottage resulting in an overall significance of <b>Slight</b> (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/ Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/ Moderate</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, non-significant impacts on air quality, access, noise and visual, are unlikely to result in a significant cumulative impact.</p>	Not Significant
Mains of Balavil	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li><b>Adverse</b> effect identified on development application and planning permission associated with the property (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Medium</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/Moderate</b> impact from road traffic noise (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/Moderate</b> visual impact due to the winding of the road (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There is potential for the Proposed Scheme to adversely affect planning permission for the conversion of the existing farm estate courtyard and mill into a mixed-use visitor attraction, principally due to change in access and encroachment into the planning development area.</p> <p>When considered in combination with, medium and slight impacts on air quality and noise and slight/moderate impact on visual, there is potential for a significant cumulative impact.</p>	Significant
West Lodge	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Slight/Moderate</b> impacts on community severance due to access restrictions (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight</b> visual impacts due to removal of some roadside vegetation and visibility of an access track and one SuDs basin. (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, non-significant impacts on air quality, noise, and visual, are unlikely to result in a significant cumulative impact.</p>	Not Significant



Receptor	Description of individual Impacts	Cumulative Impact
<b>Ruthven Farm</b>		
Knappach Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Moderate</b> impacts due to land take (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> NB and SB impact on access from the A9 to Knappach Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> NB and SB impact on access to the A9 from Knappach Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Significant <b>Moderate</b> visual impact due to loss of vegetation and installation of a 4m high noise barrier effecting views to the north and west.</li> <li>Non-significant <b>Slight/Moderate</b> impact from road traffic noise (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>The combination of significant land take and visual impacts are likely to result in a significant cumulative impact on Knappach Cottage.</p>	<b>Significant</b>
<b>Private Properties</b>		
Kerrow Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact both NB and SB on access from the A9 to Kerrow Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact both NB and SB on access to the A9 from Kerrow Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> beneficial impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/Moderate</b> visual impact due to removal of vegetation (Chapter 14: Visual)</li> <li>Non-significant <b>Slight</b> noise impacts. (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>The small improvement in air quality in combination with a negligible impact on access and non-significant visual and noise impact is not considered to result in a significant cumulative impact.</p>	Not Significant
Kerrow Farmhouse	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact on NB and SB access from the A9 to Kerrow Farmhouse (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact both NB and SB on access to the A9 from Kerrow Farmhouse (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/Moderate</b> visual impacts due to removal of vegetation (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, negligible impacts on access, visual and noise, are not considered to result in a significant cumulative impact.</p>	Not Significant
Craig-an-Darach	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact on NB and SB access from the A9 to Craig-an-Darach (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact on NB and SB access to the A9 from Craig-an-Darach (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, negligible and slight impacts on land take, access, and noise, are unlikely to result in a significant cumulative impact.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Davall Developments Ltd Land	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• <b>Adverse</b> effect on residential development planning permission on the land (planned access affected) (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Slight</b> in-combination impacts on Agricultural and Forestry interests (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Moderate/ Slight</b> visual impact due to removal of vegetation (based on assessment of viewpoint 24 and 25) (Chapter 14: Visual).</li> </ul> <p><u>Step 2</u></p> <p>The Adverse impact on access to Davall Developments land is acknowledged in (Chapter 8: C&amp;PA). In combination with the identified non-significant visual and agricultural impacts no significant cumulative impact is predicted.</p>	Not Significant
Garden Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• Non-significant (Negligible) impact on NB and non-significant (Slight Beneficial) SB impact on access from the A9 to Garden Cottage. This results in an overall <b>Slight Beneficial</b> impact. (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Slight Beneficial</b> impact on NB and non-significant (Negligible) impact on SB access to the A9 from Garden Cottage. This results in an overall <b>Slight Beneficial</b> impact. (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>• Non-significant <b>Negligible</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>All impacts on Garden Cottage are assessed as slight/moderate, slight or negligible. When considered in combination, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant
Glen View	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• Non-significant <b>Negligible</b> impact both NB and SB on access from the A9 to the Glen View (Chapter 8: C&amp;PA)</li> <li>• Non-significant (Slight Beneficial) NB and non-significant (Negligible) SB impact on access from Glen View to the A9. This results in an overall <b>Slight Beneficial</b> impact. (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>• Non-significant <b>Slight/Moderate Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>• Non-significant <b>Slight</b> visual impacts due to removal of woodland and installations of SuDS basin (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>There is potential for cumulative impacts on Glen View due to non-significant impacts to air quality, visual, land take and access. When considered in-combination with a slight improvement in noise levels, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant
Highland Wildlife Park (HWP) (located in Dunachton Estate)	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• Non-significant Negligible impact NB and No change on SB access from the A9 to HWP. This results in an overall non-significant <b>Negligible</b> impact (Chapter 8: C&amp;PA)</li> <li>• Non-significant No change to NB and non-significant Negligible Beneficial impact on SB impact on access to the A9 from HWP, resulting in an overall non-significant <b>Negligible Beneficial</b> impact (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Slight</b> impact from land-take (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Neutral</b> effect on flood risk for the Highland Wildlife Park (Chapter 11: Water)</li> <li>• Significant <b>Very Large Beneficial</b> effect on flood risk for one non-residential property within the HWP (Chapter 11: Water)</li> <li>• Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>When the above residual effects are considered in-combination, they are unlikely to result in a significant cumulative impact on the Highland Wildlife Park.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Invernahavon Caravan site	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant (Moderate) NB and non-significant (Negligible) SB impacts from the A9 to Invernahavon Caravan site. This results in an overall non-significant <b>Slight</b> impact. (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) NB and significant (High) SB impact to the A9 from Invernahavon Caravan site. This results in an overall significant <b>Moderate</b> impact. (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> visual impact, some loss of vegetation, but views will remain relatively unchanged (Chapter 14: Visual).</li> <li>Non-significant <b>Slight/Moderate Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, slight and negligible impacts on access and visual, coupled with a slight improvement in noise impacts, are unlikely to result in a significant cumulative impact.</p>	Not Significant
Laggan Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact on NB and SB access from the A9 to Laggan Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact on NB and SB access to the A9 from Laggan Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight</b> visual impact due to view of the Proposed Scheme and a SuDs basin (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, non-significant impacts on access, visual and noise, are unlikely to result in a significant cumulative impact.</p>	Not Significant
Laggan Croft 1	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Substantial</b> in-combination impacts on agricultural, sporting and forestry interests (Chapter 8: C&amp;PA) on Laggan Croft 1, due to loss of grazing land</li> <li>Non-significant <b>Slight</b> visual impact due to widening of the road and visibility of earthworks bunds (Chapter 14: Visual)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>There are significant impacts on the agricultural, sporting and forestry interests of the croft as identified in <b>Chapter 8</b>. However, as noise and visual impacts are not significant, no cumulative impact is anticipated.</p>	Not Significant
Laggan Croft 2	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Moderate/ Substantial</b> in-combination impacts on Agricultural, Sporting and Forestry interests (Chapter 8: C&amp;PA) on Laggan Croft 2, due to loss of grazing land.</li> <li>Non-significant <b>Slight</b> visual impacts due to widening of the road and visibility of one SuDs basin (Chapter 14: Visual)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>There are significant impacts on the agricultural, sporting and forestry interests of the croft as identified in <b>Chapter 8</b>. However, as noise and visual impacts are not significant, no cumulative impact is anticipated.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Meadowside (including Meadowside House and 12 Holiday Cottages)	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant Negligible impact NB and No change on SB access from the A9 to Meadowside. This results in an overall non-significant <b>Negligible</b> impact (Chapter 8: C&amp;PA)</li> <li>No change to NB and non-significant Negligible Beneficial impact on SB access to the A9 from Meadowside, resulting in an overall non-significant <b>Negligible Beneficial</b> impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> effect on business viability (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality) noted for Meadowside House and the holiday cottages at Meadowside.</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/Negligible</b> visual impacts due to loss of vegetation (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, small and negligible impacts on air quality and access, coupled with a neutral effect on business viability and slight/moderate impact on noise and visual, there is unlikely to be a significant cumulative impact.</p>	Not Significant
Milton Lodge	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Moderate</b> impacts due to land take (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) NB and non-significant (Slight Beneficial) SB impact on access from the A9 to Milton Lodge This results in an overall non-significant <b>Slight Beneficial</b> impact. (Chapter 8: C&amp;PA).</li> <li>Non-significant (Slight Beneficial) impact NB and non-significant (Negligible) SB impact on access to the A9 from Milton Lodge (This results in an overall non-significant <b>Slight Beneficial</b> impact. (Chapter 8: C&amp;PA).</li> <li>Non-significant <b>Neutral</b> impacts on business viability (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Negligible</b> visual impacts (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>Several impacts were reported on Milton Lodge, including one significant impact due to land take. However, as all other impacts were assessed as negligible, slight or beneficial. When considered in-combination, the effects are unlikely to result in a significant cumulative impact.</p>	Not Significant
Railway Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight Beneficial</b> noise impacts (Chapter 17: Noise and Vibration)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, imperceptible impacts on air quality, coupled with a slight improvement in noise impacts, are unlikely to result in significant cumulative impacts.</p>	Not Significant
Ralia Café and Tourist Information	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Moderate</b> impact due to land take (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) NB and non-significant (Slight) SB impact to access from the A9 to Ralia Café and Tourist Information. This results in an overall non-significant <b>Slight</b> impact. (Chapter 8: C&amp;PA).</li> <li>Non-significant (Negligible) NB and significant (Moderate) SB impact to access from the Ralia Café and Tourist Information to the A9. This results in an overall non-significant <b>Slight</b> impact. (Chapter 8: C&amp;PA).</li> <li>Non-significant <b>Neutral</b> effect on business viability (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> visual impact, some loss of vegetation until screen planting is established (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified a significant effect in terms of land lost to the scheme; however, upon operation, Ralia Café and Tourist Information is likely to experience little change in visitor behaviour as access is retained via the northbound off-slip and the new Newtonmore junction, resulting in a neutral effect on viability.</p> <p>Given the slight and negligible effects on access and visual issues, once screen planting is established, there is no significant cumulative impact in addition to the existing significant effect identified due to land take.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Ruthven Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact on NB and SB access from the A9 to Ruthven Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impact on NB and SB access to the A9 from Ruthven Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Imperceptible</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight/Moderate</b> visual impacts due to the road widening of the road (Chapter 14: Visual).</li> </ul> <p><u>Step 2</u></p> <p>There is potential for cumulative impacts on Ruthven Cottage given a number of non-significant effects on noise, air quality, visual and access. When considered in-combination, they are unlikely to result in a significant cumulative impact.</p>	Not Significant
Ruthven Park	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Significant <b>Substantial</b> in-combination impacts on Agricultural and Forestry interests (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight</b> visual impacts due to widening of the road (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified a substantial effect for Ruthven Park in terms of woodland issues and land take; however, given that the noise and visual impacts are considered slight or slight/moderate, there is no significant cumulative impact in addition to the existing significant residual effect identified in Chapter 8.</p>	Not Significant
Ruthven Steadings	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impacts on NB and SB access from the A9 to Ruthven Steadings (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> impacts on NB and SB access to the A9 from Ruthven Steadings (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> impacts on business viability (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight/Moderate</b> noise impacts (Chapter 17: Noise and Vibration)</li> <li>Non-significant <b>Slight</b> visual impacts, based on assessment from Viewpoint 28 (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, negligible and slight/moderate non-significant impacts on access, business viability, visual and noise, are unlikely to result in significant cumulative impacts.</p>	Not Significant
West Ralia Cottage	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Negligible</b> impact on NB and SB access from A9 to West Ralia Cottage (Chapter 8: C&amp;PA)</li> <li>Non-significant (Negligible) NB and significant (Moderate) SB impact on access to A9 from West Ralia Cottage. In combination this results in a non-significant <b>Slight</b> impact (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Small</b> impact on air quality (Chapter 16: Air Quality)</li> <li>Non-significant <b>Slight</b> visual impact (based on assessment of viewpoint 3) (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>When considered in-combination, slight and small impacts on access, visual and air quality, are unlikely to result in significant cumulative impacts.</p>	Not Significant
<b>Towns and Villages (Residential and Business Receptors)</b>		
Newtonmore	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Neutral</b> effect on community severance expected (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> social economic impacts (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> visual impact (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>Residual impacts are expected to be negligible or neutral; therefore, there are no likely significant cumulative impacts predicted for Newtonmore.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
Kingussie	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Neutral</b> effect on community severance expected (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> social economic impacts (Chapter 8: C&amp;PA)</li> <li>Significant <b>Large beneficial to Very Large Beneficial</b> effect on reducing flood risk, due to reductions in River Spey water levels for 5 receptors immediately upstream of new Spey crossing, and 1 residential property downstream (Chapter 11: Water)</li> <li>Non-significant <b>Negligible</b> visual impact, based on Viewpoints 17, 19, 20, 21 and 22 (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified a significant benefit for Kingussie in terms of reduced flood risk from the Spey; however, given neutral effects on community severance and social economic, and negligible effects on visual, there is no significant cumulative impact in addition to the existing significant beneficial effect identified.</p>	Not Significant
Lynchat	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Neutral</b> effect on community severance expected (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> social economic impacts (Chapter 8: C&amp;PA)</li> <li>Significant <b>Neutral</b> effect on flood risk due to protection provided by the proposed raised track to SuDS 534, reducing flood levels (Chapter 11: Water)</li> <li>Non-significant <b>Negligible/Slight</b> visual impact (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified non-significant impacts for Lynchat in terms of reduced flood risk, community severance, and visual. When considered in-combination, no significant cumulative impact is anticipated.</p>	Not Significant
Ruthven	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Neutral</b> effect on community severance expected (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Neutral</b> social economic impacts (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> visual impact, based on assessment of Viewpoint 28 (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>Residual impacts are expected to be slight or neutral; therefore, there are no likely significant cumulative impacts predicted for Ruthven.</p>	Not Significant
Other Receptors		
HML Railway	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>Non-significant <b>Slight</b> impact on access to the A9 from access points at level crossings (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> impact on access from the A9 to access points at level crossings (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Slight</b> impact on pedestrian access to the HML Railway at ch. 42,160 (Chapter 8: C&amp;PA)</li> <li>Non-significant <b>Negligible</b> visual impact on HML railway infrastructure, from unnamed road off the B9150 at ch. 43,150, due to removal of woodland (Chapter 14: Visual).</li> <li>Non-significant <b>Slight/ Negligible</b> visual impacts on users of the HML railway across the Proposed Scheme due to removal of tree cover and/ or elements of the Proposed Scheme limiting views from the railway (Chapter 14: Visual).</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified neutral/ negligible or slight impact for the HML in terms of effects on pedestrian and level crossing access, and effects on visual receptors. When considered in-combination there is no significant cumulative impact.</p>	Not Significant

Receptor	Description of individual Impacts	Cumulative Impact
RSPB Land	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• Non-significant <b>Slight/Moderate</b> impact due to land take (Chapter 8: C&amp;PA)</li> <li>• Non-significant <b>Negligible/Slight</b> impacts on in-combination agricultural, forestry and sporting interests (Chapter 8: C&amp;PA)</li> <li>• Non-significant impacts <b>Negligible to Slight</b> on ecological features of the Insh Marshes Reserve (Chapter 12: Ecology and Nature Conservation)</li> <li>• Non-significant <b>Slight Beneficial</b> effect on surface water quality of the River Spey related to road runoff (Chapter 11: Water)</li> <li>• Significant <b>Large Beneficial</b> effects on hydromorphology of the River Spey due to improved flow and sediment transport conditions and reduction in hydromorphological pressures (Chapter 11: Water) due to longer bridge removing need for extensive bankside erosion protection</li> <li>• Significant <b>Substantial/ Moderate</b> visual impact on Insh Marshes LLCA (Chapter 13: Landscape) due to wider embankment and bridge structures</li> <li>• Non-significant <b>Slight/ Moderate</b> visual impact to visitors of the Insh Marshes reserve due to change in proximity of the Proposed Scheme.</li> </ul> <p><u>Step 2</u></p> <p>In terms of the quantity of land lost to RSPB as a landowner, the assessment of negligible/ slight is not considered to be significant; although, the ecological value of affected land is recognised separately in the ecology assessment.</p> <p>A slight/moderate visual impact is also reported primarily due to the Spey crossing and embankment changing the view from RSPB land.</p> <p>Land lost to the Spey crossing embankment will displace some bird interests locally; however, the longer bridge will improve permeability for other species, and reduce morphological pressure on the river system. The longer bridge will improve river/ marsh floodplain connectivity when compared against the existing situation, allowing the river to migrate in the long term without the need for extensive bankside erosion protection measures.</p> <p>The wider, but shorter, embankment will still have some influence during higher flood level events; however, the longer bridge crossing will reduce upstream storage.</p> <p>The residual effects on ecology receptors are predicted to be negligible to slight and not significant. Cumulatively, the resultant conditions across the Insh Marshes at the Spey crossing are predicted to be an improvement over existing conditions.</p> <p>There will be localised effects in other areas of the Reserve due to a slight increase in downstream flood levels, SuDS and proximity to the newly dualled route; however, these are not considered to be cumulatively significant in the long term.</p> <p>With consideration of the overall Adverse and Beneficial impacts reported on RSPB land, there is potential for a significant cumulative impact.</p>	<b>Significant (Beneficial and Adverse)</b>
River Spey	<p><u>Step 1</u></p> <ul style="list-style-type: none"> <li>• Significant <b>Large Beneficial</b> effects for hydrology and hydromorphology due to improved road drainage and watercourse crossings (Chapter 11: Water)</li> <li>• Non-significant <b>Slight Beneficial</b> effect on surface water quality of the River Spey related to road runoff (Chapter 11: Water)</li> <li>• Non-significant <b>Slight/ Negligible</b> visual impacts on users of the River Spey due to removal of tree vegetation and exposing the views onto elements of the Proposed Scheme (Chapter 14: Visual)</li> </ul> <p><u>Step 2</u></p> <p>The topic assessments have identified a significant benefit for the Spey in terms of water quality from improved road drainage discharge and reduced morphological pressures; given the slight/ negligible effects on amenity of river users and visual receptors, there is no significant cumulative impact in addition to the existing significant beneficial effects identified.</p>	Not Significant

### *Designated sites of Ecological Importance*

- 20.2.19 Potential for cumulative impacts on the River Spey SAC/ SSSI, the Insh Marshes SAC and NNR, and River Spey-Insh Marshes SPA and Ramsar designations are considered in **Chapter 12 (Ecology and Nature Conservation)**. Natura 2000 designations (River Spey SAC, Insh Marshes SAC and River Spey-Insh Marshes SPA and Ramsar sites) are also considered separately via the Habitat Regulations Appraisal (HRA) under the requirements of the EC Habitats and Birds Directives, which will be issued in September 2018. The HRA has considered a range of potential impacts on the conservation objectives for qualifying interest species and habitats and determined that, with implementation of

required mitigation, there would be no adverse effect on site integrity for any of the designated sites as a result of the Proposed Scheme. **No significant cumulative impacts** are anticipated.

#### *Cumulative Impacts on Estates and Farms*

20.2.20 Within the study area for the Proposed Scheme there are several large estates and farms assessed (**Chapter 8 Community and Private Assets**) for potential impacts on agricultural, sporting and forestry interests as well as potential impact on business viability. It was recognised that each estate may house several properties identified as individual receptors, and it is necessary to consider cumulative impacts on estates and farms as a whole, even if no individual properties are assessed to have significant cumulative impacts. For this assessment, impacts assessed as slight or above are taken into consideration as it is not deemed likely that negligible or imperceptible impacts on single receptors will combine to result in significant cumulative impacts on estates and farms.

#### *Phoines Estate*

20.2.21 The Community and Private Assets assessment of the Proposed Scheme impacts on the agricultural, sporting and forestry interests of Phoines Estate determined the in-combination effects as **Slight**, which is not significant. The assessment did determine a **Moderate** impact on access to Phoines Lodge, which is considered significant. In-combination with non-significant hydrological and geological impacts on waterbodies within the estate, **no significant cumulative impact** is predicted for the Proposed Scheme, at the Estate level.

#### *Ralia Estate*

20.2.22 Impacts on the agricultural, sporting and forestry interests of Ralia Estate were assessed in-combination, as being **Moderate**, which is significant.

20.2.23 Several properties identified as receptors are located on Ralia Estate. Impacts on these receptors range from **Moderate** to **Negligible** and are shown in summary in **Table 20-2 below**. The majority of impacts are assessed to be not significant and no significant cumulative impacts are anticipated on any individual property.

Table 20-2: Summary of impacts on properties within Ralia Estate

Property	Type of impact					
	Change in Access	Land take	Business Viability	Visual	Air Quality	Noise
Inverton House	<b>High to the A9/ Slight</b> from the A9	No impact reported	No impact reported	Negligible	No impact reported	Slight/ Moderate
Milton of Nuide	<b>Moderate from the A9/ Negligible</b> to the A9	No impact reported	No impact reported	Slight	No impact reported	Slight/ Moderate
Nuide Farm	<b>Moderate from the A9/ Negligible</b> to the A9	No impact reported	No impact reported	Moderate/ Slight	No impact reported	Slight
Ptarmigan Lodge	Negligible from the A9/ Slight to the A9	No impact reported	Neutral	Slight/ Negligible	Small	Moderate Beneficial
Ralia Beag	Negligible from the A9/ Slight to the A9	No impact reported	No impact reported	Slight/ Negligible	Imperceptible	Slight/ Moderate Beneficial
Ralia Lodge	Slight Beneficial to and from the A9	Slight	No impact reported	Negligible	Imperceptible	Slight/ Moderate
Upper Nuide Cottage	<b>Moderate from the A9/ Negligible</b> to the A9	No impact reported	No impact reported	Moderate/ Slight	No impact reported	Slight Beneficial



- 20.2.24 All properties on Ralia Estate are expected to experience some change in access; with Inverton House, Milton of Nuide, Nuide Farm and Upper Nuide Cottage likely to experience a significant change. Ralia Lodge will experience improvements to access. However, as four properties will have adverse impacts on access, it is considered likely that change in access could result in a cumulative impact on access for Ralia Estate.
- 20.2.25 Ralia Lodge will experience impacts due to land take associated with the Proposed Scheme; which individually would not be considered a significant impact.
- 20.2.26 Visual impacts were reported for all properties, except Inverton house. However, no impacts were considered to be significant. **Moderate/ Slight** impacts were determined at three properties, the rest are assessed as Slight or Negligible. In-combination these are not likely to result in a significant cumulative impact.
- 20.2.27 Three properties (Ralia Lodge, Ralia Beag and Ptarmigan Lodge) were assessed for impacts on air quality, given their proximity to the Proposed Scheme. Imperceptible and small changes were determined, with no exceedances of air quality standards; therefore, no significant cumulative impact is predicted.
- 20.2.28 All properties noted were assessed for noise impacts, and no significant residual impacts were determined for any property.
- 20.2.29 Flood risk was only identified as a potential issue at Nuide Farm, and a neutral impact was determined, which is not likely to significantly affect the wider estate.
- 20.2.30 Given that the Community and Private Assets assessments identified potential for significant in-combination effects on Estate agricultural, sporting and forestry interests, and a **Moderate** effect on Inverton House, Milton of Nuide, Nuide Farm and Upper Nuide Cottage, all principally related to access, a **significant cumulative impact** is predicted at the Estate level.

#### *Ruthven Farm*

- 20.2.31 Community and Private Assets assessment of Proposed Scheme impacts on the agricultural and forestry interests of Ruthven Farm were assessed in-combination as being **Slight**.
- 20.2.32 One property, Knappach Cottage, is also included within Ruthven Farm. It was determined that there is likely to be a significant cumulative impact on Knappach Cottage due non-significant noise, air quality impacts, in combination with significant impacts caused by land take and the installation of a noise barrier affecting views from the property.
- 20.2.33 Considering impacts on Knappach Cottage in combination with slight impacts on agricultural and forestry interests, **no additional significant cumulative impacts** are anticipated on Ruthven Farm.

#### *Balavil Estate*

- 20.2.34 Community and Private Assets assessment of Proposed Scheme impacts on the agricultural, sporting and forestry interests of Balavil Estate were assessed in-combination as being **Moderate**, which is significant. Several properties identified as receptors are located on Balavil Estate. Impacts on these receptors range from **Moderate** to **Negligible** and are shown in summary in **Table 20-3**.

Table 20-3: Summary of impacts on properties within Balavil Estate

Property	Type of impact				
	Change in Access	Air Quality	Noise	Visual	Planning Permissions
Balavil House	<b>Moderate from the A9/</b> Negligible Beneficial to the A9	No impact reported	Slight/ Moderate	Slight/ Moderate	No impact reported
East Lodge	No impact reported	Small	Slight	Negligible	No impact reported
Lynvoan Cottage	Slight Beneficial to the A9/ Slight from the A9	Small	Slight/ moderate	Slight/ Moderate	No impact reported
Mains of Balavil	No impact reported	Medium	Slight/ Moderate	Slight/ Moderate	<b>Adverse</b>
West Lodge	No impact reported	Imperceptible	Slight/ Moderate	Slight	No impact reported

- 20.2.35 Four properties were assessed for impacts on air quality and, as there were no exceedances of air quality standards at any property, there is no potential for cumulative air quality impacts.
- 20.2.36 All properties within Balavil Estate were assessed with **Slight/Moderate** or **Slight** noise impacts, in-combination this is unlikely to result in cumulative noise impacts.
- 20.2.37 All properties were assessed for visual impacts, as no impacts were significant ranging from **Negligible** to **Slight/Moderate**, there is no potential for cumulative visual impacts.
- 20.2.38 Adverse impacts were identified with respect to development planning permission for the conversion of the existing farm estate courtyard and mill into a mixed-use visitor attraction (Mains of Balavil). When considered in conjunction with the effects on agricultural, sporting and forestry interests, the Proposed Scheme is predicted to result in **significant cumulative impact** for Balavil Estate.

#### *Dunachton Estate*

- 20.2.39 Community and Private Assets assessment of Proposed Scheme impacts on agricultural and forestry interests of Dunachton Estate were assessed in-combination as being **Slight**, which is not significant.
- 20.2.40 The HWP is within the grounds of Dunachton Estate on a ground lease basis to the Royal Zoological Society of Scotland. As the HWP as a business is not owned and run by Dunachton Estate, it is not considered to contribute to any further cumulative impacts on the estate.
- 20.2.41 When considered in-combination with a Slight impact on the Dunachtonmore LLCA, the Proposed Scheme is predicted to result in **no significant cumulative impacts** for Dunachton Estate.

## 20.3 Type 2 Cumulative Impacts

20.3.1 As discussed in **Section 20.1**, the Type 2 cumulative impact assessment includes consideration of committed projects within the A9 Perth to Inverness Dualling Programme; and other reasonably foreseeable developments within the vicinity of the Proposed Scheme. These include developments with planning permission, planning applications and sites allocated for economic and residential development, as identified in CNPA development documents (CNPA, 2015, 2017a, 2017b). The full list of projects considered for Type 2 cumulative impact assessment is presented in **Table 20-4.**, below. Where a location refers to a specific chainage (ch.), these can be found in **Volume 3 Proposed Scheme Drawings 5.2 to 5.13.**

Table 20-4: Reasonably Foreseeable Developments within the vicinity of the Proposed Scheme

Ref No.	Development Description	Location	Development Status	Scoped In/ Out	Comments
A9 Dualling Project 01	Trunk road project	Luncarty to Pass of Birnam	Consented, construction scheduled to commence in 2018/2019	In	Southern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 02	Trunk road project being designed prior to statutory processes	Pass of Birnam to Tay Crossing	In progress	In	Southern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 03	Trunk road project being designed prior to statutory processes	Tay Crossing to Ballinluig	In progress	In	Southern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 04	Trunk road project being designed prior to statutory processes	Pitlochry to Killiecrankie	In progress	In	Southern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 05	Trunk road project being designed prior to statutory processes	Killiecrankie to Glen Garry	In progress	In	Southern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 07	Trunk road project being designed prior to statutory processes	Glen Garry to Dalwhinnie	In progress	In	Central Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 08	Trunk road project being designed prior to statutory processes	Dalwhinnie to Crubenmore	In progress	In	Central Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 10	Trunk road project	Kincaig to Dalraddy	Consented, construction completed in 2017	In	Central Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 11	Trunk road project being designed prior to statutory processes	Dalraddy to Slochd	In progress	In	Northern Section of the A9 Dualling Programme; EIA development
A9 Dualling Project 12	Trunk road project being designed prior to statutory processes	Tomatin to Moy	In progress	In	Northern Section of the A9 Dualling Programme; EIA development
07/230/CP CNPA LDP H1 (Newtonmore)	Land designated by CNPA for housing development (120 residential units)	Land between Perth Road and Station Road, Newtonmore Approx. ch. 44,400 – 44,800	Planning Permission for 81 units granted in 2009 (07/230/CP), currently under construction	Out	Non-EIA development

Ref No.	Development Description	Location	Development Status	Scoped In/ Out	Comments
CNPA LDP ED1 (Newtonmore)	Rear of Café; Land allocated for economic development	Newtonmore Approx. ch. 44,500 – 44,600	No status available	Out	Small scale; Non-EIA Development
CNPA LDP ED2 (Newtonmore)	Industrial Park; Land allocated for economic development	Newtonmore Approx. ch. 44,800 – 45,600	In operation/ existing use	Out	Non-EIA Development
CNPA LDP ED1 (Kingussie)	Land allocated for economic development	West of Spey Street, Kingussie Approx. ch. 50,100 – 50,300	Called-in by CNPA (2013/0011/DET)	Out	Amended as a new allocation for community uses, no longer valid; Non-EIA Development
CNPA LDP ED2 (Kingussie)	Council Depot; Land allocated for economic development	Kingussie Approx. ch. 49,300 – 49,400	In operation/ existing use	Out	Small scale; Non-EIA Development
CNPA LDP ED3 (Kingussie)	McCormack's Garage; Land allocated for economic development	Kingussie Approx. ch. 49,300	In operation/ existing use	Out	Small scale; Non-EIA Development
08/184/CP CNPA LDP EP2 (Kingussie)	St Vincent Terrace; Land designated by CNPA for housing development (4 residential units)	Land 250 m south of St Vincents Hospital, Gynack Road, Kingussie Approx ch. 49,700	Planning Permission for plot layout approved on appeal in 2009 (08/184/CP), whereas permissions for individual housing plots granted in 2014. Planning conditions of individual housing plots to be discharged	Out	Non-EIA Development
09/048/CP CNPA LDP EP1 (Kingussie)	Master plan for phased development of 300 houses; economic development uses; community uses including all infrastructure, landscaping etc. Land designated by CNPA for housing development (300 units)	Land to the northeast of Kingussie, north of access road Kerrow Drive Dunbarry Terrace and A86, Kingussie Approx ch. 50,600 to 51,000	Planning Permission in Principle granted on 18/01/2013	In	Non-EIA development, however environmental information required by CNPA to support the proposal
2013/0190/MSC & 2013/0190/MSC PPA-001-2013	Matters specified in Conditions 1, 2, 5, 10, 11, 16, 18, 27 & 29 of Permission in Principle 09/048/CP relating to submission of revised Master Plan, supporting information and details of formation of construction haul road to A86 trunk road, phase 1 housing layout for 37 serviced private plots and 18 affordable dwellings, trunk road access, site roads, drainage, landscaping and waste management; and Variation of Condition 4 to permit access from Dunbarry Terrace/ Road and Kerrow Drive network	Land to the north and east and west of Dunbarry Terrace and Kerrow Drive, Kingussie Approx. ch. 50,500 to 50,900	Initially refused (19/09/2013), then Permission granted on appeal (PPA-001-2013) on 29/03/2017	In	Non-EIA development, however environmental information required by CNPA to support the proposal
2015/0316/DET	Amended route of temporary haul road and siting of contractors' compound for the servicing and construction of Phase 1 Housing Development of 37 plots and 18 affordable dwellings granted under Permission Ref 2013/0190/MSC / PPA-001-2013	Land to the north and east and west of Dunbarry Terrace and Kerrow Drive, Kingussie Approx. ch. 50,500 – 50,900	Permission granted on 29/03/2017	In	Non-EIA development, however environmental information required by CNPA to support the proposal

Ref No.	Development Description	Location	Development Status	Scoped In/ Out	Comments
2016/0143/LBC	Works to facilitate conversion of redundant farm buildings to visitor facilities and commercial use, including alterations and extension of existing structures; construction of new buildings for cafe, catering and events use; formation of vehicle parking areas	Balavil Mains Farmhouse, Kingussie, PH21 1LU Approx. ch. 53,500 – 53,600	Permission granted on 31/01/2018	In	Non-EIA development, however environmental information required by CNPA to support the proposal
2018/0067/DET	Erection of 23 affordable houses	Land 115 m northeast of Craig An Darach, High Street, Kingussie Approx. ch. 50,500 – 50,900	Received on 14/02/2018, Called-in by CNPA (to be determined)	In	Non-EIA development, however Environmental Information required by CNPA to support the proposal

20.3.2 Projects ‘scoped-out’ from the assessment include those that are generally small in scale and are not subject to the EIA process. However, some non-EIA developments have been considered further in the assessment, due to CNPA requirements on provision of relevant environmental information, such as Habitats Regulations Appraisal (HRA). These include: Planning Permission in principle (09/048/CP) and the subsequent related planning applications (2013/0190/MSC/PPA-001-2013, 2015/0316/DET, 2018/0067/DET) related to land allocated for housing development in Kingussie; and Planning Permission (2016/0143/LBC) related to visitor facilities and commercial use conversion works at Balavil Mains Farmhouse.

20.3.3 All trunk road projects in the A9 Dualling Programme have been ‘scoped-in’ to the assessment of cumulative impacts.

#### Potential for Type 2 Cumulative Impacts – Construction Stage

20.3.4 Detailed construction programmes and phasing for each individual project within the A9 Dualling Programme, have not been yet confirmed; however, it is anticipated that the majority of the A9 Dualling will be constructed between 2019 and 2025. Project 10, Kincaig to Dalraddy is complete and open to traffic, and Project 01, Luncarty to Pass of Birnam, has completed the relevant statutory processes and is scheduled to begin construction during 2018/ 2019.

20.3.5 Construction impacts are temporary in nature and will occur in the area local to each individual dualling scheme. As such, whilst this assessment is unable to take detailed individual construction programmes into account, it is considered highly unlikely that any individual receptor will be affected by all projects within the A9 Dualling Programme, due to their geographic separation.

20.3.6 There is, however, risk of cumulative impacts arising from the construction of the Proposed Scheme and other foreseeable developments in the area, as discussed in **Paragraph 20.3.2**.

20.3.7 Potential Type 2 cumulative construction stage impacts considered include:

- Potential impacts on people and communities, including property, estate land and/ or business viability
- NMU network
- Designated Sites of Ecological Importance
- Materials, Waste and Resources

*People and Communities*

- 20.3.8 It is noted that multiple A9 dualling construction projects, at different stages of completion, could result in an adverse cumulative impact on journey times, with delays due to traffic management and/or lane closures. Individually, these will be temporary in nature; however, multiple delays experienced by regular A9 users is considered likely to have a cumulative, albeit temporary, impact.
- 20.3.9 With respect to the noted Housing Development in Kingussie (CNPA LDP EP1/ Planning 09/048/CP and related planning applications), estimated delivery is split into four phases. The first three phases are programmed to deliver 110 residential units from 2017 to 2029 (CNPA, 2017c) and there is therefore potential to overlap with the construction timeframe for the Proposed Scheme.
- 20.3.10 In relation to the Planning Permission for works at Balavil Mains Farmhouse, the project is likely to commence within three years of the decision date, i.e. between 2018 and 2021. There is therefore potential that construction of the Proposed Scheme could coincide with the construction works at Balavil Mains Farmhouse.
- 20.3.11 Given that both development projects require access to/ from the trunk road network, professional judgment was applied to consider any potential cumulative impacts that could arise in terms of access and amenity.
- 20.3.12 The assessment of potential Type 2 cumulative impacts on people and community receptors takes into consideration temporary changes in noise levels, vibration, air quality, visual effects, commuting and/ or access from/ to properties and land. These impacts, both adverse and beneficial, from the Proposed Scheme and other relevant developments (referred to as 'Developments considered') were then compared to allow for the identification of potential significant cumulative impacts, as summarised in **Table 20-5**, below.
- 20.3.13 For 'Developments considered', the projects have been assigned an impact using professional judgement where there is no published EIA to refer to that reports the potential environmental impacts. Note the detailed construction programmes for the projects/ developments considered have not been confirmed.

Table 20-5: Type 2 Cumulative construction effects on people and communities

Project Name/ Developments Considered	Description	Receptor	Residual construction impact from the development considered	Residual construction impact from the Proposed Scheme	Cumulative Impacts
A9 Dualling Programme Project 01 Luncarty to Pass of Birnam	Northern extent of Project 01 is located >50km south of the Proposed Scheme				Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 01 construction.
A9 Dualling Programme Project 02 Pass of Birnam to Tay Crossing	Northern extent of Project 02 is located >50km south of the Proposed Scheme				Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 02 construction.
A9 Dualling Programme Project 03 Tay Crossing to Ballinluig	Northern extent of Project 03 is located >50km south of the Proposed Scheme.				Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 03 construction.
A9 Dualling Programme Project 04 Pitlochry to Killiecrankie	Northern extent of Project 04 is located >50km south of the Proposed Scheme.				Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 04 construction.
A9 Dualling Programme Project 05 Killiecrankie to Glen Garry	Northern extent of Project 05 is located >30km south of the Proposed Scheme.				Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 05 construction.
A9 Dualling Programme Project 07 Glen Garry to Dalwhinnie	Northern extent of Project 07 is located approximately 14km south of the Proposed Scheme, with approx. 15km from Ralia Estate to North and South Drumochter Estate boundaries. Potential for cumulative impacts on business operations (access and commuting) of Ralia Enterprises that operates North Drumochter (A9 Project 07 & 08) and Ralia Estate (A9 Project 09) and manages South Drumochter (A9 Project 07 & 08).	Ralia Estate (Ralia Enterprises)	Slight (North and South Drumochter Estates agricultural and sporting interests)	Moderate/ Substantial (Ralia Estate sporting interests) Adverse (Sporting viability)	<b>Potentially significant impact</b> on Estate operations with concurrent scheme construction
	Northern extent of Project 07 is located approximately 14km south of the Proposed Scheme. However, the HML runs throughout both. Potential for cumulative impacts on Highland Main Line (HML) railway related to land access and business viability as works may affect Network Rail’s ability to undertake typical operations during that time.	Highland Main Line Railway	Slight (access)	Moderate (visual) Neutral (business viability)	Not Significant works associated with HML/ Network Rail (NR) land will only be undertaken in full consultation with NR

Project Name/ Developments Considered	Description	Receptor	Residual construction impact from the development considered	Residual construction impact from the Proposed Scheme	Cumulative Impacts
A9 Dualling Programme Project 08 Dalwhinnie to Crubenmore	Northern extent of Project 08 is located approximately 3.5km south of the Proposed Scheme, with approx. 15km from Ralia Estate to North and South Drumochter Estate boundaries. Potential for cumulative impacts on business operations (access and commuting) of Ralia Enterprises that operates North Drumochter (A9 Project 07 & 08) and Ralia Estate (A9 Project 09) and manages South Drumochter (A9 Project 07 & 08).	Ralia Estate (Ralia Enterprises)	Slight (South Drumochter Estate agricultural and sporting interests)	Moderate/ Substantial (Ralia Estate sporting interests) Adverse (Sporting viability)	<b>Potentially significant impact</b> on Estate operations with concurrent scheme construction
	Northern extent of Project 08 is located approximately 3.5km south of the Proposed Scheme, with Phoines Estate land extending throughout both Projects. Potential for cumulative impacts on business operations (access and commuting) of Phoines Estate related to sporting activities, as Phoines Estate has affected land in both A9 Project 08 and A9 Project 09 extents.	Phoines Estate	Moderate (sporting interests)	Slight (in-combination assessment)	<b>Potentially significant impact</b> on Estate operations with concurrent scheme construction
	Northern extent of Project 08 is located approximately 3.5km south of the Proposed Scheme. However, the HML runs throughout both. Potential for cumulative impacts on Highland Main Line (HML) railway related to land access and business viability as works may affect Network Rail’s ability to undertake typical operations during that time.	Highland Main Line Railway	Slight (access)	Moderate (visual) Neutral (business viability)	Not Significant works associated with HML/ Network Rail (NR) land will only be undertaken in full consultation with NR
A9 Dualling Programme Project 10 Kincaig to Dalraddy	Project 10 construction has been completed and is open to traffic.	No significant cumulative impacts are anticipated			
A9 Dualling Programme Project 11 Dalraddy to Slochd	Southern extent of Project 11 is located approximately 6 km north of the Proposed Scheme.	Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 11 construction.			
A9 Dualling Programme Project 12 Tomatin to Moy	Southern extent of Project 12 is located >30km north of the Proposed Scheme.	Unlikely to result in significant cumulative impacts due to distance and geographic separation. No receptors in the Proposed Scheme will be directly affected by Project 12 construction.			



Project Name/ Developments Considered	Description	Receptor	Residual construction impact from the development considered	Residual construction impact from the Proposed Scheme	Cumulative Impacts
Housing Development in Kingussie (08/184/CP, 2013/0190/MS/PPA-001-2013, 2015/0316/DET, 2018/0067/DET)	<p>Site boundaries of the Housing Development Land overlap in places with the boundaries identified for the Proposed Scheme.</p> <p>Potential for cumulative impacts on community assets (open space) and local residents related to access, commuting, noise, vibration, air quality and visual.</p> <p>*Note that impacts listed under the 'Development Considered' column have been assigned using professional judgement as there is no EIA to refer to confirm potential environmental impacts.</p>	Kingussie Community	*Slight/ Moderate (access/ amenity)	Slight (community severance) Slight Beneficial (business viability)	<b>Potentially significant impact</b> on access and amenity issues with concurrent construction
		Glebe Ponds	*Slight/ Moderate (access/ amenity)	Substantial (visual)	
		Kerrow Cottage	*Moderate to Substantial (access/ amenity)	Substantial (visual)	<b>Potentially significant impact</b> on access and amenity issues with concurrent construction and/ or change required to development site access provision to/ from the trunk road network
		Kerrow Farmhouse	*Moderate to Substantial (access/ amenity)	Substantial (visual)	
		Craig-an-Darach	*Moderate (access/ amenity)	Slight (access)	
Works at Balavil Mains Farmhouse (2016/0143/LBC)	<p>Site boundaries of the Balavil Mains Farmhouse overlap in places with the boundaries identified for the Proposed Scheme.</p> <p>Potential for cumulative impacts on business operations and/or local residents related to access, commuting, noise, vibration, air quality and visual.</p> <p>*Note that impacts listed under the 'Development Considered' column have been assigned using professional judgement as there is no EIA to refer to for this development.</p>	Balavil Estate	*Negligible to Slight (business operations)	Moderate (in-combination assessment)	<b>Potentially significant impact</b> on access and amenity issues with concurrent construction and/ or change required to development site access provision to/ from the trunk road network
		Mains of Balavil	*Slight (Access/ amenity)	Substantial (visual)	
		Balavil House	*Negligible to Slight (access/ amenity)	Substantial (visual)	

*Phoines Estate – inter-project cumulative impacts (construction stage)*

- 20.3.14 It is recognised that Phoines Estate land straddles both the Proposed Scheme (Crubenmore to Kincaig, Project 09) and the Dalwhinnie to Crubenmore (Project 08) extents. The Project 08 assessment noted that strategic level phasing between construction projects could help manage cumulative construction stage impacts; however, given a targeted completion date of 2025 for A9 Dualling, it is prudent to consider potential for some unavoidable construction stage overlaps between projects.
- 20.3.15 The Project 08 ES recorded a **Moderate** impact on Phoines Estate sporting interests and **Slight** impacts have been recorded for the Proposed Scheme. Given the physical separation provided between project extents by the existing Crubenmore dual carriageway, and the fact that the dual carriageway access to Phoines Estate at Etteridge will not be affected by either project, the cumulative impact, assuming some construction stage overlap between projects, is predicted to be **Moderate**. There is therefore potential for **significant cumulative impacts** on Estate operations, due to construction stage disruption in terms of traffic management and temporary access diversions within the Project 08 and Project 09 extents.
- 20.3.16 Each individual project is subject to construction stage mitigation requirements on maintenance of access to properties, or provision of suitable alternatives, during construction, to minimise disruption. Each project will also have a community liaison team and be required to implement an Agricultural and Estates Management Plan, which will help coordinate between Estate and construction contractor requirements.

*Ralia Estate – inter-project cumulative impacts (construction stage)*

- 20.3.17 It is understood that ‘Ralia Enterprises’ operates and/ or manages four Estates in the surrounding area; Ralia Estate (Project 09), Crubenmore Estate (Project 08) and North and South Drumochter Estates (which each have land crossing both Project 07 and Project 08 extents).
- 20.3.18 The Project 07 and Project 08 assessments determined that North and South Drumochter Estates could experience **Slight** impacts during construction. No direct impacts were assigned for Crubenmore Estate as the main access to/ from the A9 is at the Crubenmore junction on the existing Crubenmore dual carriageway, which will not be affected by either Project 08 or Project 09.
- 20.3.19 The Project 07 and Project 08 assessments noted that strategic level phasing between construction projects could help manage cumulative construction stage impacts; however, given a targeted completion date of 2025 for A9 Dualling, it is prudent to consider potential for some unavoidable construction stage overlaps between projects.
- 20.3.20 Given that Ralia Enterprises will have vehicles, livestock and visitors on each of the four Estates, it is considered likely that some staff will operate across all four, as required. The Proposed Scheme assessment for Ralia Estate recorded **Moderate/ Substantial** impacts on the Estate’s sporting interests during construction.
- 20.3.21 Given the physical separation provided between Project 08 and Project 09 extents by the existing Crubenmore dual carriageway, and the fact that the dual carriageway access to Crubenmore Estate will not be affected by either project, the cumulative impacts, assuming some construction stage overlap between projects, is predicted to be **Moderate**. There is therefore potential for **significant cumulative impacts** on Ralia Enterprises’ Estate operations, due to construction stage disruption in terms of traffic management and temporary access diversions within the Project 07, Project 08 and Project 09 extents.

20.3.22 Each individual project is subject to construction stage mitigation requirements on maintenance of access to properties, or provision of suitable alternatives, during construction, to minimise disruption. Each project will also have a community liaison team and be required to implement an Agricultural and Estates Management Plan, which will help coordinate between Estate and construction contractor requirements.

#### *NMU Network*

20.3.23 Two long distance NMU routes, National Cycle Network 7 (NCN7) and General Wade’s Military Road (GWMR), were identified as NMU receptors that are likely to experience impacts from construction of the Proposed Scheme and other relevant developments.

20.3.24 NCN7 runs across the majority of the A9 Dualling Programme extents, from Project 04 (Pitlochry to Killiecrankie) in the south, to Project 12 (Tomatin to Moy) in the north. NCN7 will be locally re-routed, where required in any A9 scheme, to accommodate widening of the trunk road. As such, long distance and local users of NCN7 may experience diversions and occasional closures depending on local construction stage activities. There is therefore potential for **significant cumulative impacts** on users of the NCN7 route during construction.

20.3.25 General Wade’s Military Road (GWMR) network extends from Dunkeld to Inverness and is known to be utilised by Non-Motorised Users across the A9 Dualling Programme extents. As such, there is potential for GWMR network users to experience temporary changes in amenity and access due to construction of multiple A9 Dualling projects and other relevant developments. However, as the GWMR is less likely to be used as a long-distance route unlike NCN7, construction impacts are more likely to be encountered at a local scale. Therefore, whilst there is potential for cumulative impacts on users of the GWMR network during construction, these are not considered significant.

20.3.26 There is potential for cumulative impacts on the local NMU network, in the vicinity and/or within the boundaries of the Housing Development Land in Kingussie and the Proposed Scheme. This local NMU network comprises two Core Paths (NMU20 and NMU22), a community path (NMU23) and an informal walking route (NMU10), described in more detail **Chapter 9 (Effects on All Travellers)**. Should construction of the Proposed Scheme and the Kingussie Housing Development overlap, there is potential for **significant cumulative impacts** on amenity for users of the local NMU network during construction.

#### *Designated Sites of Ecological Importance*

20.3.27 Designated nature conservation sites that could potentially be affected by construction works for the Proposed Scheme and other relevant projects include:

- River Spey SAC/ SSSI
- River Spey-Insh Marshes Ramsar/ SPA/ SSSI
- Insh Marshes SAC/ NNR

20.3.28 The catchment area of the River Spey extends across five projects of the A9 Dualling Programme, from Project 07 to Project 11, including the Proposed Scheme. Two other developments identified with potential for combined impacts with the Proposed Scheme, are also located within the River Spey catchment.

20.3.29 The construction of the Proposed Scheme and other relevant developments will increase the proportion of impermeable surfaces in the catchment, and therefore could have potential to increase the rate of surface water runoff, with associated risk of flooding downstream. However,

each approved project will be subject to construction drainage and runoff attenuation controls via SuDS requirements in consultation with SEPA, SNH and the relevant Local Authorities. Therefore, any change due to surface runoff is not expected to present significant cumulative adverse impacts in terms of flood risk or water quality.

- 20.3.30 The River Spey SAC extends north from Drumochter Hills and is in proximity to construction works extents for the Proposed Scheme and three other A9 Dualling Programme projects; Project 07 (Glen Garry to Dalwhinnie), Project 08 (Dalwhinnie to Crubenmore) and Project 11 (Dalraddy to Slochd). Project 10 (Kincaig to Dalraddy) is complete and open to traffic. The River Spey SSSI does not extend into Project 07 or Project 08 extents.
- 20.3.31 The River Spey-Insh Marshes Ramsar/ SPA/ SSSI designations, and the Insh Marshes SAC and NNR designations extend from Newtonmore, to Loch Insh and just past Kincaig to the north. As the Kincaig to Dalraddy scheme is complete, and given the direction of flow, there is no potential for A9 dualling construction projects to the north of the Proposed Scheme to affect the Insh Marshes habitats or conservation objectives.
- 20.3.32 There is some potential for other developments in proximity to the Proposed Scheme to present construction risks on designated sites; for example, construction of the Housing Development in Kingussie and Balavil Mains development works. It is noted that CNPA required further environmental information for the Housing Development in Kingussie and the Balavil Mains works.
- 20.3.33 Given each development's proximity to the River Spey and Insh Marshes designated sites and given that Planning Permission has been granted (subject to a number of conditions), it is considered that each project has met and/or aims to satisfy CNPA (and therefore SEPA and SNH) requirements; and there would be no significant environmental impacts with appropriate drainage and construction stage mitigation controls. As such, it is considered that there is little potential for significant cumulative impacts between these developments and the Proposed Scheme on any designated site interests, water quality or flood risk.
- 20.3.34 With respect to A9 Projects 07, 08 and the Proposed Scheme, each has been subject to Habitats Regulations Appraisal (HRA) which concluded that with required mitigation, for example, controls on surface water management, and exclusion zones and periods to avoid and minimise disturbance to sensitive species, no adverse impacts on site integrity are expected when considering potential for cumulative impacts of these projects in-combination with each other.
- 20.3.35 With respect to the Insh Marshes NNR, it is also considered unlikely that any other A9 Dualling Project would result in cumulative impacts in-combination with the Proposed Scheme.

#### *Materials, Waste and Resources*

- 20.3.36 The Proposed Scheme is likely to result in cumulative environmental impacts with regards to the generation of embodied carbon emissions, the depletion of natural resources and the generation of waste as a result of construction of the Scheme, being progressed in conjunction with other projects under the A9 Dualling Programme. The resultant combined cumulative impacts of the Proposed Scheme with the other A9 Dualling projects are unlikely to be significant at wider scales or become key decision-making issues, however they are likely to be locally or regionally significant in terms of material demand and waste generation. There is therefore potential for **significant cumulative impacts** on materials, waste and resources during the construction of the Proposed Scheme and other A9 projects.
- 20.3.37 With respect to the other reasonably foreseeable developments, due to their relative small scale (Balavil Mains Farmhouse) and phased construction programme (Housing Development in

Kingussie), it is considered unlikely that these will result in significant cumulative impacts on material demand and waste generation with the Proposed Scheme.

#### Potential for Type 2 Impacts – Operational Stage

20.3.38 Potential for Type 2 cumulative impacts at the operational stage (permanent impacts) considered:

- People and Communities, including property, estate land and/ or business viability
- NMU Network
- Designated Sites of Ecological Importance
- Woodland
- Peat
- Ground Water Dependent Terrestrial Ecosystems (GWDTE)

#### *People and Communities*

20.3.39 The assessment of potential Type 2 cumulative impacts on people and communities during operation takes into consideration changes in noise levels, vibration, air quality, visual, flood risk, commuting, access to/ from properties or land and loss of land. The most significant impacts on a given receptor, both adverse and beneficial, from the Proposed Scheme and other relevant developments were then compared to inform the identification of significant cumulative impacts, as summarised in **Table 20-6** below.

Table 20-6: Type 2 Cumulative operational impacts on people and communities

Project Name	Description	Receptor	Residual operational impact from the development considered	Residual operational impact from the Proposed Scheme	Cumulative Impacts
A9 Dualling Programme Project 07 Glen Garry to Dalwhinnie	Potential for cumulative impacts on business operations of Ralia Enterprises that operates North Drumochter (A9 Project 07 & 08) and Ralia Estate (A9 Project 09) and manages South Drumochter (A9 Project 07 & 08). Upon completion of each scheme, access and movement between Estates related issues are minimal or improved, and residual impacts are typically related to land lost to the scheme	Ralia Estate (Ralia Enterprises)	Slight South Drumochter Estate (sporting interests)	Moderate Ralia Estate (sporting interests)	Not Significant Land lost on individual estates is not considered cumulatively significant to Ralia Enterprises' operations
	Potential for cumulative impacts on Highland Main Line (HML) railway related to business operations and land access.	HML	Slight (access)	Slight (access)	Not Significant Alternative means of access have been provided and therefore it is not considered cumulatively significant to Network Rail operations

Project Name	Description	Receptor	Residual operational impact from the development considered	Residual operational impact from the Proposed Scheme	Cumulative Impacts
A9 Dualling Programme Project 08 Dalwhinnie to Crubenmore	Potential for cumulative impacts on business operations of Ralia Enterprises that operates North Drumochter (A9 Project 07 & 08) and Ralia Estate (A9 Project 09) and manages South Drumochter (A9 Project 07 & 08). Upon completion of each scheme, access and movement between Estates related issues are minimal or improved, and residual impacts are typically related to land lost to the scheme	Ralia Estate (Ralia Enterprises)	Negligible/ Slight South Drumochter Estate (sporting interests)	Moderate Ralia Estate (sporting interests)	Not Significant Land lost on individual estates is not considered cumulatively significant to Ralia Enterprises' operations
	Potential for cumulative impacts on business operations of Phoines Estate related to sporting activities. Upon completion of each scheme, access related issues are minimal or improved, and residual impacts are typically related to land lost to the scheme	Phoines Estate	Moderate (sporting interests)	Slight (in-combination assessment)	Not Significant Compared to Project 08, there will be a small amount of land lost to Project 09, and a higher value is attributed to land in Project 08 due to grouse operations
	Potential for cumulative impacts on Highland Main Line (HML) Railway related to land access and business operations. Note that impact recorded in P08 ES relates to a single access issue at access point 24.	HML	Moderate (access)	Slight (access)	Not Significant Alternative means of access have been provided and therefore it is not considered cumulatively significant to Network Rail operations
A9 Dualling Programme Project 10 Kincaig to Dalraddy	Potential for cumulative impacts on business operations and commercial properties located within Dunachton Estate: Meadowside Holiday Cottages and Highland Wildlife Park	Dunachton Estate	Minor Negative (access and loss of land)	Slight (in-combination assessment)	Not Significant Land lost and changes to access are not considered cumulatively significant to Estate's operations
		Highland Wildlife Park (Dunachton Estate)	Negligible (noise)	Slight (land-take) Very Large Beneficial (flood risk)	Not Significant
		Meadowside Holiday Cottages (Dunachton Estate)	Negligible (air quality)	Slight/ Moderate (noise)	Not Significant No air quality standards are exceeded

Project Name	Description	Receptor	Residual operational impact from the development considered	Residual operational impact from the Proposed Scheme	Cumulative Impacts
Housing Development in Kingussie (08/184/CP, 2013/0190/MSC/PPA-001-2013, 2015/0316/DET, 2018/0067/DET)	Site boundaries of the Housing Development Land overlap in places with the boundaries identified for the Proposed Scheme.  Potential for cumulative impacts on community assets (open space), operations of local businesses and residents.  *Note that impacts listed under the 'Other Development' column have been assigned using professional judgement as there is no EIA to refer to for this development.	Kingussie Community	*Moderate Beneficial (Social-Economic) *Negligible (access)	Negligible (visual) Large to Very Large Beneficial (flood risk)	Not Significant
		Glebe Ponds	*Negligible/ Slight (visual)	Slight/ Moderate (visual)	Not Significant
		Kerrow Cottage	*Moderate/ Substantial (amenity and visual)	Slight/ Moderate (visual) Small Beneficial (Not Significant) (air quality)	<b>Significant</b> (visual)
		Kerrow Farmhouse	*Slight/ Moderate (visual)	Slight/ Moderate (visual and noise)	Not Significant
		Craig-an-Darach	*Moderate/ Substantial (visual/ increased traffic)	Slight (noise)	Not Significant
Works at Balavil Mains Farmhouse (2016/0143/LBC)	Site boundaries of the Balavil Mains Farmhouse overlap in places with the boundaries identified for the Proposed Scheme.  Potential for cumulative impacts for local residents and operation of Balavil Estate  *Note that impacts listed under the 'Other Development' column have been assigned using professional judgement as there is no EIA to refer to for this development.	Balavil Estate	*Moderate/ Substantial Beneficial (business viability) *Negligible (access/ commuting)	Moderate (in-combination assessment)	Not significant
		Balavil House	*Negligible (access/ commuting)	Moderate (access)	Not Significant
		Mains of Balavil	*Substantial Beneficial (business viability)	Adverse (SB access) Medium (Not Significant) (air quality)	Not Significant

### *Phoines Estate – inter-project cumulative impacts (operational stage)*

- 20.3.40 It is recognised that Phoines Estate land will be permanently affected by more than one A9 Dualling project. The largest area affected is in Project 08 (Dalwhinnie to Crubenmore), which affects land identified as productive grouse moor. The Project 08 ES determined that restructuring of affected grouse beats may be required and that the residual impacts would be **Moderate**, which is a significant residual impact. In Project 09 extents (Crubenmore to Kincaig), Phoines Estate land is not identified as productive grouse moor, and there are therefore no further impacts identified in terms of the Estate's grouse interests.
- 20.3.41 Phoines Estate land affected in the Project 09 extents has been identified as having potential to support low ground shooting; however, it is not currently used for such purposes. Therefore, although there will cumulative land loss between the two projects, the considered cumulative impact is no greater than the **Moderate** impact determined for the higher value grouse land and operations assessed in the Project 08 ES.

*Ralia Enterprises – inter-project cumulative impacts (operational stage)*

- 20.3.42 North and South Drumochter Estates and Ralia Estate will have residual impacts in terms of land lost to each project; however, these are not considered cumulatively significant as they are distinct Estates. It is acknowledged that access to the estates will be impacted as a result of the new access provision.

*Dunachton Estate – inter-project cumulative impacts (operational stage)*

- 20.3.43 The Project 10 ES recorded a **Minor** adverse impact on access to/ from and land-take of Dunachton Estate and **Slight** in-combination impact on agricultural interests and forestry land have been recorded for the Proposed Scheme. Therefore, although there will be cumulative land lost between the two projects, the considered cumulative impact is no greater than the Slight impact, determined by low value forestry and agricultural land. As such, no significant cumulative impacts on Dunachton Estate are anticipated.

*NMU Network*

- 20.3.44 NCN7 will be locally, but permanently, re-routed in some places to accommodate widening of the trunk road and some stretches will include passing places to accommodate shared use for trunk road maintenance and local access; however, affected sections of NCN7 will be restored to provide an equal or better standard of provision. There are also new sections of cycleway being introduced. In any area where the distance between NCN7 and A9 is reduced, there may be locally adverse impacts on users in terms of route amenity; however, project related mitigation will aim to screen such areas where possible. There will also be some beneficial impacts where safer crossing points are introduced and where shared use with vehicles is reduced. Overall, it is considered that the Proposed Scheme and other relevant developments will not result in significant cumulative impact on NCN7.
- 20.3.45 In relation to the General Wade’s Military Road, it is considered that the Proposed Scheme will result in **Slight** residual impacts on the GWMR network, due to changes in noise, views and partial loss of track and/ or track realignment. Other foreseeable projects that will have permanent impact on the General Wade’s Military Road include the Housing Development in Kingussie and Projects 07 to 12 of the A9 Dualling Programme. Similarly, these developments are likely to result in **Slight** residual impacts on the GWMR, due to partial loss of the track, extended journey length/ time and changes in the amenity. Furthermore, there is also the potential for some beneficial impacts where safer means of crossing the A9 are provided. However, as the GWMR is unlikely to be used as a long-distance route, these impacts are more likely to be encountered at a local scale. Therefore, it is considered that the Proposed Scheme and other relevant projects will not result in cumulative impacts on users of the GWMR network, however these are not deemed significant.
- 20.3.46 In relation to the local NMU network in Kingussie, residual impacts arising from the Housing Development are expected to be minimal on NMU10, NMU 20 and NMU23. As such, no significant cumulative impacts on the local NMU Network in Kingussie were identified.

*Designated Sites of Ecological Importance*

- 20.3.47 It is considered that A9 Dualling Programme drainage design requirements including SuDS, will improve overall water quality being discharged to the River Spey and its tributaries. This will result in **Neutral to Large Beneficial** Impacts on the River Spey catchment around the A9. No significant impacts are anticipated to arise from the Housing Developments in Kingussie and Balavil Mains Farmhouse, assuming that drainage conditions specified in the Planning Permissions/ Applications



are met. Accordingly, operation of the Proposed Scheme and other relevant developments will result in **beneficial significant cumulative impacts** on water quality in the River Spey catchment.

- 20.3.48 As noted previously, in relation to nature conservation sites, the most significant risks are due to construction stage disturbance, habitat losses and potential water quality impacts. Upon completion of each scheme, affected habitats not permanently lost to infrastructure will be reinstated where appropriate, and permeability through the A9 for species will be improved. It is therefore determined that, during the Proposed Scheme operation, there will be no significant cumulative impacts on nature conservation sites in-combination with other completed A9 dualling projects, or other development projects in proximity to the Proposed Scheme.

#### *Woodland*

- 20.3.49 Whilst it is expected that projects within the A9 Dualling Programme will partially reduce woodland areas in proximity to each scheme; in line with the Scottish Government's Policy on Control of Woodland Removal (Forestry Commission Scotland, 2009), each A9 Dualling Project aims to provide compensatory native species woodland planting to achieve no overall loss. Woodland connectivity has also been considered as part of the A9 Dualling Programme and at the project level, aiming to restore and improve connectivity where possible.
- 20.3.50 It is considered that the compensatory planting will mitigate significant adverse impacts arising from loss of woodland parcels within the vicinity of the A9. However, any loss of Ancient Woodland, due to its age and high intrinsic value, is not readily replaceable. As a result, the Proposed Scheme in conjunction with other A9 Projects is likely to result in **significant cumulative impacts** on Ancient Woodland.

#### *Peat*

- 20.3.51 In combination with other A9 Dualling projects, the Proposed Scheme has the potential to contribute to cumulative environmental impacts with regards excavation and disturbance of carbon-rich soils and peat within the Cairngorms National Park. This is particularly relevant to the Proposed Scheme when considered with Project 07, Project 08, Project 11 and Project 12; which are known to have carbon-rich soils and peat present and may therefore have similar impacts. However, as part of the iterative design process for each project, impacts on these receptors have been avoided or reduced where practicable, with appropriate mitigation in terms of outline peat management plans and beneficial and suitable re-use of peat identified where possible, enabling excavated peat to retain its integrity and carbon and assist the extent of peatland habitats in the locality to be maintained.
- 20.3.52 Based on the assessment information available and following the implementation of project-level mitigation, these potential cumulative impacts are therefore expected to be localised and are unlikely to be significant at a wider scale. As such, no significant cumulative impacts on carbon-rich soils and peat deposits are anticipated to arise from the Proposed Scheme, other relevant A9 Projects or foreseeable developments including the Balavil Mains Farmhouse and housing development in Kingussie.

#### *Groundwater Dependent Terrestrial Ecosystems*

- 20.3.53 In combination with other A9 Dualling projects, there is potential for the Proposed Scheme to contribute to cumulative disturbance or loss of groundwater dependent terrestrial ecosystems (GWDTE). This is relevant to the Proposed Scheme when considered with Project 05, Project 07,

Project 08, Project 11 and Project 12; which are known to have similar receptors present and will result in some habitat loss and disturbances.

- 20.3.54 Like peat and other constraints, as part of the iterative design process for each project, impacts on these receptors have been avoided or reduced where practicable, with mitigation identified in terms of outline peat and habitat management plans, habitat re-instatement, restoration, compensation, monitoring and appropriate construction and operation-stage working practices and groundwater control and drainage considerations. Where relevant, the potential impacts on these receptors have additionally been considered in the context of The Conservation (Natural Habitats, & c.) Regulations 1994 (referred to as the Habitat Regulations), as part of the Habitats Regulations Appraisals (HRA) for each Proposed Scheme, which consider construction and operation-stage impacts on the qualifying interests of designated areas (which include certain GWDTE habitat types) and the in-combination impacts of them with other reasonably foreseeable projects.
- 20.3.55 Based on the assessment information available and following the implementation of project-level mitigation, residual impacts in terms of permanent GWDTE habitat loss and disturbance have been assessed to be predominantly localised on each project due to the wider distribution of the various habitat types in the region, including designated sites, and given the overall scale of the effects in relation to each Proposed Scheme. These impacts are therefore considered unlikely to become an issue at a wider scale and no significant cumulative impacts on GWDTE habitats are anticipated to arise from the Proposed Scheme, other relevant A9 Projects or foreseeable developments for the Mains of Balavil and housing in Kingussie.

## 20.4 Conclusions

- 20.4.1 The Proposed Scheme is likely to result in significant cumulative construction and operational stage impacts on a number of receptors, including Estate land and Residential and Commercial Properties. Potential significant cumulative impacts of the Proposed Scheme in combination with other developments (Type 2 impacts) were also identified for both construction and operational stage. These include Kingussie Community, Community and Estate land, Residential and Commercial Properties, NMU Routes, River Spey SAC, Ancient Woodland and Materials, Waste and Resources.
- 20.4.2 A summary of Significant Cumulative Impacts of the Scheme (Type 1) and in conjunction with other relevant projects (Type 2), is presented in **Table 20-7**, below. Impacts are considered adverse unless otherwise stated.

Table 20-7: Summary of Type 1 and Type 2 Significant Cumulative Impacts

Receptor	Type 1 Cumulative Impacts		Type 2 Cumulative Impacts	
	Construction	Operation	Construction	Operation
Kingussie Community	Not Significant	Not Significant	<b>Significant</b>	<b>Significant Beneficial</b>
Glebe Ponds	Not Significant	Not Significant	<b>Significant</b>	Not Significant
Phoines Estate	Not Significant	Not Significant	<b>Significant</b>	Not Significant
Ralia Estate (Ralia Enterprises)	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>	Not Significant
Balavil Estate	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>	Not Significant
Craig-an-Darach	Not Significant	Not Significant	<b>Significant</b>	Not Significant
Kerrow Cottage	Not Significant	Not Significant	<b>Significant</b>	<b>Significant</b>
Kerrow Farm	Not Significant	Not Significant	<b>Significant</b>	Not Significant

Receptor	Type 1 Cumulative Impacts		Type 2 Cumulative Impacts	
	Construction	Operation	Construction	Operation
Ralia Café and Tourist Information	<b>Significant</b>	Not Significant	Not Significant	Not Significant
Ptarmigan Lodge	<b>Significant</b>	Not Significant	Not Significant	Not Significant
Knappach Cottage	Not Significant	<b>Significant</b>	Not Significant	Not Significant
Mains of Balavil	Not Significant	<b>Significant</b>	<b>Significant</b>	Not Significant
Balavil House	Not Significant	Not Significant	<b>Significant</b>	Not Significant
NCN7	Not Significant	Not Significant	<b>Significant</b>	Not Significant
Kingussie NMU network	Not Significant	Not Significant	<b>Significant</b>	Not Significant
RSPB Land	Not Significant	<b>Significant (Adverse and Beneficial)</b>	Not Significant	Not Significant
River Spey SAC	Not Significant	Not Significant	Not Significant	<b>Significant Beneficial</b>
Ancient Woodland (AWI)	Not applicable Ancient Woodland loss is considered significant in the Ecology Chapter; no further cumulative impact is applied to this loss		<b>Significant</b> Ancient Woodland losses across applicable A9 schemes occur during construction; these losses are considered permanent and cumulatively significant	
Materials, Waste and Resources	Not Significant	Not Significant	<b>Significant</b>	Not Significant

## 20.5 References

Cairngorms National Park Authority (2015) *Cairngorms National Park Local Development Plan 2015*. Available at: <http://cairngorms.co.uk/wp-content/uploads/2017/08/Interactive-LDP-Optimised-for-web.pdf> (Accessed 09 May 2018)

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