## 22 Summary of Significant Residual Impacts

## 22.1 Introduction

- 22.1.1 This chapter summarises potential significant residual impacts arising from the Proposed Scheme. These are defined as any significant adverse impacts remaining after the application of mitigation measures, as summarised in **Chapter 21.** Consideration also extends to any significant beneficial effects associated with the Proposed Scheme.
- 22.1.2 Within **Chapters 8-18** potential impacts have, in the majority of cases, been classified as significant when they were identified as having moderate or greater impacts. This chapter reports medium/ long-term residual impacts only; it does not report significant adverse impacts identified during the construction phase or, for Landscape and Visual aspects, the short-term impacts predicted at operation year 1.
- 22.1.3 The topic chapters listed below in this Environmental Statement (ES) have concluded that the Proposed Scheme will not result in any significant adverse residual impacts:
  - People and Communities Effects on All Travellers (Residual benefits with respect to NMU safety via underpass crossings, and for A9 users as dualling will reduce driver frustration)
  - Geology, Soils and Groundwater (Residual issues addressed via peat management and restoration)
  - Road Drainage and Water Environment (Residual benefits to water quality and flood risk via introduction of SuDS, improved watercourse crossings and drainage network)
  - Ecology and Nature Conservation (Residual benefits with respect to improved mammal and fish permeability, vegetation effects addressed via habitat management and restoration)
  - Landscape (Dualling contained within existing infrastructure corridor, no significant adverse effects after 15-25 years of operation and establishment of planted measures)
  - Cultural Heritage (Loss of Dalnaspidal old bridge to Proposed Scheme, local reuse of material required to dress new structures)
  - Air Quality (No significant long term issues)
  - Noise (No significant long term issues)
  - Materials (No significant long term issues)
- 22.1.4 Residual adverse effects are predicted in relation to impacts on business viability at Balsporran Cottages, and visual impacts from five receptor viewpoints. These are summarised in **Table 22-1**.



| Receptor                                                   | Summary of Adverse Residual Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Significance                             |  |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--|
| People and Communities – Community and Private Assets      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |  |
| Balsporran Cottage<br>Business Viability                   | Potential adverse impact to the business as a result of construction works,<br>although access will need to be maintained by the contractor at all times.<br>The temporary business impact is therefore likely to be adverse; mitigation<br>measures will be employed (SMC-S3, SMC-CP1, SMC-CP2, SMC-CP3 and P07-<br>CP5); however, this is not considered to reduce the impact to neutral.                                                                                                                                                   | Adverse<br>(during contruction<br>stage) |  |
| Visual                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |  |
| Viewpoint 2 Level<br>Crossing at<br>Dalnaspidal            | Although mixed native woodland to the north will become established sufficiently to replace woodland lost in construction of the new access road embankment and SuDS basins 003 and 004, the extent of the dualling earthworks will be clear, but the effect will continue to reduce over time                                                                                                                                                                                                                                                | Moderate                                 |  |
| Viewpoint 11 from the<br>NCN7 at Drumochter<br>Pass        | Significant change in vicinity due to series of split levels between HML railway,<br>NCN7, A9 carriageways and BDL<br>Hard infrastructure unlikely to soften much (visually) with time, but will eventually<br>become an accepted part of the local landscape                                                                                                                                                                                                                                                                                 | Moderate                                 |  |
| Viewpoint 16 at<br>Drumochter Lodge                        | Significant change in vicinity due to new access underpass layout, local woodland removal and raised A9 carriageways in front of Lodge<br>Visual screen berm significant in itself, suitable replacement planting will soften over longer timeframe, but will still be a noticeable element of the Lodge's outlook                                                                                                                                                                                                                            | Moderate                                 |  |
| Viewpoint 18 from the<br>NCN7 north of<br>Drumochter Lodge | Significant change in vicinity due to new access underpass layout, raised A9 carriageways, new SuDS and lay-by, local woodland removal and NCN7 realignment in vicinity<br>Woodland and slope planting treatment will soften over time, but tree growth will be relatively slow                                                                                                                                                                                                                                                               | Moderate                                 |  |
| Viewpoint F: Lay-by<br>northbound ch. 5,800                | Significant change as the parapet and retaining wall will be visible; the northbound carriageway will be visible; rock face/ retaining wall or steeply graded earth embankments will be clearly visible; cut rock face work might possibly have been undertaken; steep gradients and possibly retaining walls will be in place on the south side of the carriageway.<br>Mitigation will soften impacts over time: on the east side, the realigned NMU and retaining wall will be partially clad with stone or rockwork; some sections will be | Moderate                                 |  |

## Table 22-1: Summary of Significant Adverse Residual Impacts

## 22.1.5 It is important to recognise where the Proposed Scheme is considered to result in any significant residual beneficial effects, as summarised in **Table 22-2** below.

Table 22-2: Summary of Significant Beneficial Residual Impacts

| Receptor                                                  | Summary of Beneficial Residual Impact                                                                                                                                                                                                                                                     | Significance             |  |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--|
| Road Drainage and Water Environment                       |                                                                                                                                                                                                                                                                                           |                          |  |
| Road (A9)<br>(ch. 3,800 to 3,900)<br>(ch. 7,200 to 7,700) | Upsizing of culverts crossing the A9 to increase conveyance capacity - the design of the Proposed Scheme provides a beneficial impact to the water environment in terms of flood risk at these locations as it results in a decrease (removal) in water levels at critical infrastructure | Very Large<br>Beneficial |  |
| Allt Dubhaig (MW7.2)                                      | The watercourse will benefit from improved continuity of sediment through the catchment, improved sediment dynamics and more natural flows from tributaries as a result of Proposed Scheme works at upstream crossings.                                                                   | Moderate<br>Beneficial   |  |

22.1.6 The table above identifies significant beneficial effects; however, it should also be noted that there will be an overall reduction in driver stress (reported in **Chapter 9** as a **slight beneficial** effect), which is one of the key A9 Dualling Programme Objectives. As set out in Chapter 9, the dualled road will improve the opportunities for overtaking, which will reduce journey times and frustration. Removal of right turn manoeuvres across the carriageway and inclusion of type A



lay-bys is anticipated to provide an improvement to safety, further reducing fear and frustration which both contribute to driver stress.

- 22.1.7 A number of **slight beneficial** impacts are also predicted in terms of:
  - improvements to community severance and socio-economic impacts at Dalnaspidal, as reported in **Chapter 8**
  - improvements in access provided by the Dalnaspidal Junction, Type A lay-bys and NMU link at NMU2, NMU3 and NMU4; improvements at NMU6 with lay-bys offering improved stopping facilities for NMUs and an NMU link and underpass providing access to NMU6 from the southbound carriageway, as reported in **Chapter 9**
  - reductions in flood risk at various watercourses and points along the A9, as reported in **Chapter 11**
  - improvements in noise levels at Dalnaspidal Farm and Balsporran Cottages (slight benefit); and 1 and 2 Station Cottages, School House, School Cottage and Station House in Dalnaspidal (slight/ moderate benefit), as reported in Chapter 17
- 22.1.8 Overall, the Proposed Glen Garry to Dalwhinnie A9 Dualling Scheme is predicted to result in safety benefits for vehicle travellers on the A9, and for non-motorised users needing to cross the A9. The scheme will result in the loss of some soils and habitats to hard standings and excavations associated with the road; however, with adoption of the mitigation developed for the scheme there will be benefits for locally degraded peat habitats, an increase in native woodland cover and benefits for mammals and aquatic species. There will be short term landscape and visual impacts given the extent of the construction works; however, the scheme follows the route of the existing A9, and it is considered that these effects will reduce over time.
- 22.1.9 Most impact risks are related to the construction stage and this ES, including the Schedule of Mitigation Commitments, will become key contract documents for Contractor compliance. When considered in conjunction with legislative compliance, and the need for further consultations and working method agreements with statutory advisors and regulatory bodies, it is recognised that environmental impact risks and controls will continue to be addressed through future detailed design and construction stages.



