

9 People and Communities,

Effects on all Travellers

9.1 Introduction

- 9.1.1 This chapter presents the Environmental Impact Assessment (EIA) of the Effects on All Travellers for A9 Dualling Project 7 – Glen Garry to Dalwhinnie (Central Section). The Proposed Scheme under assessment is described in **Chapter 5**.
- 9.1.2 For ease of reference the term Non-Motorised Users (NMUs) has been used to describe pedestrians, cyclists and equestrians. This chapter also considers vehicle travellers including users of public transport.
- 9.1.3 Potential for impacts on the following has been considered:
- Journey length
 - Amenity value
 - Ease of access to the outdoors
 - Views from the road
 - Driver stress
- 9.1.4 In order to provide context to this EIA the following factors within the study area, generally relating to NMUs, have also been considered:
- Local access
 - Parking provision
 - Public transport services
- 9.1.5 In accordance with the Design Manual for Roads and Bridges (DMRB) '*Interim Advice Note (IAN) 125/09*', this chapter covers the 'vehicle travellers' and 'pedestrians, cyclists and equestrians' topics within DMRB Volume 11, Section 3, Part 8 (Effects on All Travellers). The updated IAN 125/15 recommends that Part 6 (Land Use), Part 8 (Pedestrians, Cyclists, Equestrians and Community Effects) and Part 9 (Vehicles) are combined into an assessment on 'People and Communities'.
- 9.1.6 In the absence of revised DMRB guidance setting out a combined methodology for People and Communities, the approach adopted retains the assessments in two separate chapters under the heading of 'People and Communities', Community and Private Assets (**Chapter 8**) and Effects on All Travellers (this chapter).
- 9.1.7 **Chapter 8** considers issues related to community severance and the potential impacts of the Proposed Scheme on access to residential and commercial land, community facilities, development, agricultural, forestry and sporting land.
- 9.1.8 The following drawings, provided in **Volume 3**, should be considered in relation to this chapter:

- **Baseline Plan Drawing 9.1, All Travellers – Overview**
- **Baseline Plan Drawing 9.2, All Travellers – Views from the Road**
- **Assessment Plan Drawing 9.3, All Travellers – Views from the Road, Proposed Scheme**
- **Assessment Plan Drawings 9.4-9.7, All Travellers - NMUs**

Non-Motorised Users (NMUs)

Land Reform (Scotland) Act 2003

- 9.1.9 Part 1 of *'The Land Reform (Scotland) Act 2003'* came into effect in February 2005 and established statutory public rights of access to most land and inland water bodies for recreational and other purposes. This is based on responsible access and puts obligations on both the users and land owners.
- 9.1.10 The legislation also outlines duties for local authorities and national park authorities, such as preparing Core Path plans and maintaining routes, keeping them free of obstructions and encroachment. Section 10 of the Act states it is the duty of Scottish Natural Heritage (SNH) to issue *'The Scottish Outdoor Access Code'* (Scottish National Heritage, 2005) which provides guidance on these access rights and responsibilities. It is also the duty of SNH to promote the Access Code and understanding of it.

A9 Dualling Non-Motorised User (NMU) Access Strategy

- 9.1.11 The Proposed Scheme has developed taking into consideration the *'A9 Dualling Programme Non-Motorised User (NMU) Access Strategy'* (Transport Scotland, 2016) which sets out various opportunities and constraints in relation to NMUs and A9 dualling.
- 9.1.12 As well as setting route wide objectives, the *'NMU Access Strategy'* developed section-specific opportunities to be considered throughout the DMRB Stage 3 design process. The potential opportunities relevant to this chapter include the following:
- To improve existing parking facilities at Balsporran
 - To provide NMU connections associated with the Dalnaspidal Junction
- 9.1.13 A separate project-specific access study has been undertaken through the design process. The study considered a variety of access options, which informed the developing design of the Proposed Scheme and embedded mitigation, key to retaining continuity of NMU access across the A9 corridor. Subsequent consultation and engagement with stakeholders allowed the project team to fully consider the suitability of access proposals.

Vehicle Travellers

- 9.1.14 In terms of vehicle travellers, this chapter assesses the potential impacts of the Proposed Scheme on views from the road. This is defined as the extent to which travellers are exposed to the different types of scenery through which a route passes. The extent to which travellers can perceive the landscape in which they are passing will vary with the relative level of the road in question and the surrounding landscape.

- 9.1.15 In addition to the ability of the traveller to see the view, the assessment takes into consideration the route type, landscape character and the special quality of the views experienced within the Cairngorms National Park (CNP).

Vehicle Travellers - Driver Stress

- 9.1.16 DMRB defines driver stress as “...the adverse mental and physiological effects experienced by a driver traversing a road network”. There are many factors which can influence driver stress such as speed and flow, road layout, opportunities to overtake and frequency of junctions. Stress however is subjective, and the levels of stress for drivers will vary depending on factors including driving experience, knowledge of the route, temperament and health.
- 9.1.17 The main components therefore considered in the assessment of driver stress are: traffic flows, speed, and frustration.

9.2 Approach and Methods

- 9.2.1 This section firstly sets out the baseline data used in this chapter, then the methodology used to assess potential impacts of the Proposed Scheme on NMUs; it then goes on to set out the methodology for assessing potential impacts on vehicle travellers, in terms of views from the road and driver stress.
- 9.2.2 This assessment considers both temporary (construction phase) and permanent (operational phase) impacts on NMUs and vehicle travellers. The impacts are based on the worst case scenario and therefore determine impacts at year 1 once the Proposed Scheme is operational. **Section 9.6** (Residual Impacts) outlines any potential impacts once mitigation (i.e. planting) has been taken into consideration at years 15-25, once vegetation has become established.

Baseline Conditions

- 9.2.3 Baseline data for NMUs and vehicle travellers has been collected through a combination of desk based studies, consultations and site visits:

Desk Based Assessment

- Review of the ‘A9 Dualling Programme Strategic Environmental Assessment (SEA) Strategic Landscape Review’ (Transport Scotland, 2014)
- Review of online maps to identify NMU resources within the study area, including cycle paths, Core Paths, tourist walks and crossing points (CPs)
- Review of web-based tools including panoramic photographs and road traffic cameras to understand levels of screening provided by existing vegetation, earthworks and landform
- Web based search to identify key views and areas of scenic quality from the existing NMU network
- Review of three dimensional visualisation model of the Proposed Scheme (produced by the CFJV)
- Review of Regional and Local Landscape Character Areas

Consultation

9.2.4 The following consultations were undertaken:

- Walking Groups Consultation, 28 November 2014 (programme wide) held at the Dewars Centre Perth. Attendees included; Scottish National Heritage (SNH), Visit Scotland, The Highland Council (THC), Perth and Kinross Council (PKC), Cairngorms National Park Authority (CNPA), The Mountaineering Council of Scotland, Scottish Orienteering Association, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, National Access Forum, Perth and Kinross Access Forum, Cairngorms Access Forum and John Muir Trust
- Local Authority Access Officers meeting (THC and CNPA), on 5 February 2015 (Central Section only)
- NMU Forum 26 May 2015 (programme wide) held at the Dewars Centre, Perth. Attendees included; Visit Scotland, PKC, THC, CNPA, Cairngorms Access Forum, The Mountaineering Council of Scotland, Scottish Orienteering Association, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, John Muir Trust, Scotways, SNH, National Access Forum, Perth and Kinross Access Forum, Sustrans, HITRANS, TACTRAN, Highland Perthshire Cycling, ByCycle, Cycle Touring Club Scotland, Highland Cycle Campaign, Velocity Inverness, Inverness City Cycle Forum, Cycling Scotland, British Horse Society (BHS) and Sustainable & Active Travel Team
- NMU Forum 27 May 2016 (programme wide) held at the Dewars Centre, Perth. Attended by Living Streets, PKC, Perth and Kinross Countryside Trust, THC, CNPA, Cairngorms Local Outdoor Access Forum, The Mountaineering Council of Scotland, Ramblers Scotland, Paths for All, Scottish Outdoor Access Network, John Muir Trust, Scotways, SNH, National Access Forum, Sustrans, HITRANS, TACTRAN, ByCycle, Cycle UK, Highland Cycle Campaign, Cycling Scotland, BHS, and Association of British Riding Schools
- NMU Drop in session 23 November 2016 (Central Section only)
- Accessibility Workshop 30 March 2017 (programme wide) held at Buchanan House, Glasgow. Attended by People Friendly Design (PFD) and Mobility and Access Community for Scotland (MACS)
- Accessibility Workshop 10 October 2017 (programme wide) held at Buchanan House, Glasgow. Attended by MACS

9.2.5 Further details on consultation can be found in **Chapter 7**.

Site Visits

9.2.6 The following site visits were undertaken by CFJV staff:

- To identify summer views from the road, September 2015
- To identify winter views from the road, February 2015
- To verify NMU facilities and amenity value, August 2016, November 2016 and May 2017
- Other ad hoc visits from CFJV staff

Non-Motorised Users (NMUs)

- 9.2.7 Considering the requirements placed on landowners under the regulations of the Land Reform (Scotland) Act 2003 regarding maintenance and upkeep of public access areas, it has been considered that any existing NMu routes affected by the scheme should be maintained and improved, where possible, regardless of the level of use and the type of user. Where the type of user is identified within this assessment, this has been through information provided via the consultation events and site based observations noted above.

Study Area

- 9.2.8 The study area covers a 1km wide corridor, 500m either side of the existing A9 carriageway, as shown on **Drawing 9.1 (Volume 3)**. However, for the purpose of the baseline, a wider area for NMu routes between 1 and 3km was considered in order to fully understand NMu use and access around Project 7 extents. This study area has been defined using professional judgement.

Assessment Methodology

- 9.2.9 The assessment of the potential impacts of the Proposed Scheme on pedestrians, cyclists, and equestrians was undertaken with reference to DMRB Volume 11, Section 3, Part 8 (Highways Agency et. al. 1993).
- 9.2.10 The key impacts that have been assessed include:
- Journey length and accessibility – changes in journey length may be as a result of realigning routes, diversions or even closures
 - Amenity value – amenity is defined here as “*the relative pleasantness of the journey*” in accordance with DMRB
 - Ease of access to the outdoors

Sensitivity

- 9.2.11 Sensitivity is primarily determined based on the importance of the route rather than the level of use. For this project, where an NMu route or community land was attributed to more than one category the highest sensitivity was applied. The criteria are defined below in **Table 9-1**.

Table 9-1: NMu Sensitivity Criteria

Sensitivity	Characteristics/ Types of Paths and Community Land
High	Vindicated rights of way Asserted rights of way Core Paths/ proposed Core Paths Access to and amenity value of Nationally important community land (e.g. National Parks, Munros, National Nature Reserves)
Medium	Claimed rights of way National Cycle Routes Access to and amenity value of Regionally important community land (e.g. Country Parks, forests, Corbetts and Grahams)
Low	Local routes/ other paths out with above categories Access to and amenity value of Locally important community land (e.g. local parks and playing fields)

- 9.2.12 **Chapter 8** defines community land as areas that provide an established public recreational resource, such as playing fields, country parks, waterways or areas identified as Open Space

within Local Plans. As previously noted, ‘*The Land Reform (Scotland) Act 2003*’ establishes statutory rights of responsible access on and over most land, including inland water. It is therefore acknowledged that additional areas of privately owned land may be used informally by the community. Access to these features is assessed in this chapter under the heading of ‘Access to Outdoor Areas’.

Changes in Journey Length and Accessibility

- 9.2.13 Changes in journey length will most likely occur due to direct impacts such as closures, diversions and alterations introduced during the construction stages of the Proposed Scheme. It could also be the result of indirect impacts, such as increased traffic flows, leading NMUs to use an alternative route.
- 9.2.14 Where there is an anticipated change in journey length this is shown on **Drawings 9.4 to 9.7 (Volume 3)** as a Journey Length Assessment (JLA). The criteria used to determine the magnitude of impact to changes in journey length is described below in **Table 9-2**.

Table 9-2: *Magnitude of Impact Criteria for Changes to NMU Journey Length*

Magnitude	Characteristics
High	Greater than 500m closure or loss of NMU route Alteration of a route to nationally important community land Alteration to a route regularly used by vulnerable users
Medium	Between 250 and 500m closure or loss of NMU route Alteration of a route to regionally important community land
Low	Between 100 and 250m closure or loss of NMU route Alteration of a route to locally important community land
Negligible/ No change	Less than 100m closure or loss of NMU route

- 9.2.15 The matrix used to determine the significance of impact on journey length is shown in **Table 9-3**. The impact can be either beneficial or adverse.

Table 9-3: *Significance of Impact on NMU Journey Length*

Sensitivity \ Magnitude	Low	Medium	High
	High	Moderate	Substantial/ Moderate
Medium	Moderate/ Slight	Moderate	Substantial/ Moderate
Low	Slight/ Negligible	Slight	Moderate
Negligible	Negligible	Slight/ Negligible	Slight

- 9.2.16 Significance is not absolute and should be defined for individual assets in relation to their context and location. A higher level of significance is generally attached to large-scale impacts and impacts on highly sensitive or sensitive receptors; therefore, moderate impacts on highly sensitive receptors can be more significant than substantial impacts on less sensitive receptors.
- 9.2.17 In the event of a Moderate/ Slight impact, whereby Moderate is considered significant and Slight is considered not significant, supporting text explains whether the particular impact is considered significant or not, based upon the local context of the individual receptor.

Changes in Amenity

- 9.2.18 It is acknowledged that changes to the amenity of a journey are subjective; however, for the purpose of this assessment it is considered that, where NMUs would experience a change in traffic (increased flows) or road-related noise, visual impact and/ or air quality, there would be an impact on amenity, either beneficial or adverse.
- 9.2.19 Where existing NMU routes are accessed from existing at-grade crossing points, it is considered that there would be an improvement in NMU safety where replacement access is provided via dualled carriageway underpasses.
- 9.2.20 Therefore, potential changes in amenity were considered where:
- Existing CPs for paths are affected by the Proposed Scheme
 - Noise and air quality would potentially increase or decrease
 - The Proposed Scheme would be visible from existing paths/ community land
- 9.2.21 In line with DMRB guidance, the assessment of changes in amenity of NMU routes does not use sensitivity criteria and assessment matrices to determine significance. The significance of impact on amenity is determined using professional judgement, taking into consideration the magnitude of change in other factors such as views, air quality, and noise levels. The assessment also includes consideration of amenity impacts on community land and outdoor community facilities.
- 9.2.22 The significance of impact criteria for changes in amenity are described in **Table 9-4** below. Significance of impact can be either beneficial or adverse.

Table 9-4: *Significance of Impact on NMU Amenity*

Significance	Characteristics
Substantial	Where there is a substantial change in the existing view and/ or air quality and/ or a major change in noise levels and/ or substantial change in traffic flows resulting in change in safety.
Moderate	Where there is moderate or noticeable change in the existing view and/ or air quality and/ or a moderate change in noise levels and/ or moderate change in traffic flows resulting in change in safety.
Slight	Where there is slight or barely perceptible change in the existing view and/ or air quality and/ or a slight change in noise levels and/ or slight change in traffic flows resulting in change in safety.
Negligible/ No change	Very little or no discernible change from baseline conditions equating to a no-change situation.

- 9.2.23 The assessment of impacts on amenity was undertaken based on data provided in relation to:
- Predicted traffic flows
 - Predicted noise levels at receptors representative of NMU routes
 - Predicted air quality at receptors representative of NMU routes
 - Predicted impacts on views from receptors representative of NMU routes

- 9.2.24 The raw data is provided in **Appendix 9.1**, which can be found in **Volume 2**.

Overall Impacts on NMU Routes (journey length and amenity)

- 9.2.25 To determine overall significance of impacts on NMU routes, the significance of changes in journey length and amenity were considered together, based on these two factors having an

equal weighting of importance. Where an impact is only identified for one factor, the degree of overall significance was considered accordingly.

Potential Impacts on Access to the Outdoors

- 9.2.26 The objective of this assessment was to determine any likely significant effects on access to the outdoors. This includes the ability to make use of an outdoor area or path, and the ease with which access can be gained.
- 9.2.27 The assessment has been undertaken for outdoor areas and community land that can be accessed from NMU routes within the study area, as identified in **section 9.3**. The assessment of potential impacts on access to the outdoors was informed by consideration of the potential impacts to the surrounding NMU network.

Vehicle Travellers - Views from the Road

- 9.2.28 DMRB defines ‘view from the road’ as the “*extent to which travellers, including drivers, are exposed to different types of scenery through which a route passes*”. This assessment considers:
- Type of scenery or landscape through which the route passes, and which travellers may have wider views of
 - The extent to which travellers may be able to view the scene and the duration of the view
 - Quality of the landscape including the Special Qualities attributed to the CNP
 - Presence of features of particular interest or prominence in the view and duration of visibility

Study Area

- 9.2.29 The study area for views from the road focuses on the views experienced from the existing A9 road corridor. The views considered extend across all visible skyline including landform, landmark features, vegetation, residential buildings at Dalnaspidal and road, rail, and power infrastructure.
- 9.2.30 The extent to which travellers perceive the landscape varies with the relative level of the road, surrounding topography and vegetation. The categories used in assessing this include:
- No view – road in very deep cutting or contained by earth bunds, vegetation or adjacent structures
 - Restricted view – road in frequent cuttings, or with deep cuttings across slopes, vegetation or adjacent structures blocking the view
 - Intermittent view – road generally at-grade but with shallow cuttings, vegetation or structures at intervals
 - Open view – road generally at-grade or on embankment with views extending over the wider landscape or only restricted by existing landscape features
- 9.2.31 DMRB Volume 11, Section 3, Part 9 requires consideration of “*any especially good or bad potential views along the route*”. The scenic quality of the views has been determined using the Special Landscape Quality Assessment within **Chapter 14** and professional judgement.

- 9.2.32 To assist with the assessment of the views from the road a review of the broad Landscape Character Areas has been undertaken. Details of Regional and Local Landscape Character Areas are provided in **Chapter 13**.

Views from the Road Impact Assessment

- 9.2.33 The impact assessment for views from the road is similar to the methodology used in **Chapter 14**, which is set out in accordance with 'Guidelines for Landscape and Visual Impact Assessment Third Edition' (Landscape Institute and the Institute of Environmental Management and Assessment, 2013). The methodology provides guidance to assess the susceptibility and sensitivity to change, magnitude of visual change and significance of visual effect.
- 9.2.34 The potential impact on views from the road was assessed through comparison of the existing baseline scenario and views likely to be experienced by vehicle travellers on the Proposed Scheme. A three-dimensional visualisation model was used to aid the assessment of perceived changes in view, and the professional judgement of experienced landscape specialists was employed to determine whether the views would be adversely or beneficially affected.
- 9.2.35 The assessment also considered embedded mitigation such as landscape earthworks. For future assessment years, and as any additional mitigation, i.e. landscape planting, will likely not be effective at the year of opening, views from the road have been assessed during winter of year one and summer of years 15 -25.
- 9.2.36 It is important to note that vegetation establishment in areas with high altitude (and latitude), high rainfall and frequent low temperatures, such as is found in the Proposed Scheme, will be slow.
- 9.2.37 In the absence of specific assessment criteria from DMRB, **Table 9-5** sets out general criteria in order to determine the impact significance

Table 9-5: *Impact Significance Criteria for views from the road*

Impact	Typical Criteria
Substantial	A major deterioration or improvement in views from the road. Adverse: The project would cause major deterioration to views or loss of views from the road where travellers currently experience extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest. Beneficial: The project would lead to a major improvement in a view where travellers would experience new extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest.
Moderate	A notable deterioration or improvement in views from the road. Adverse: The project would cause a notable deterioration to, or loss of views from the road where travellers currently experience partial/ intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/ distinctive landscape character, or features of interest. Beneficial: The proposals would cause a notable improvement to views from the road where travellers would experience new partial/ intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/ distinctive landscape character, or features of interest.
Slight	Minor deterioration or improvement in views from the road. Adverse: The project would cause limited deterioration to or loss of views from the road where travellers currently experience views of low quality landscape/ unremarkable or degraded landscape character, or has heavily restricted views/ no view of surrounding landscape regardless of quality. Beneficial: The project would cause limited improvement to views from the road where the traveller would experience new views of unremarkable landscape, or has heavily restricted views/ no view of surrounding landscape regardless of quality.
Negligible/ No Change	No deterioration or improvement in views from the road.

Vehicle Travellers - Driver Stress

9.2.38 DMRB Volume 11, Section 3, Part 9 ‘*Vehicle Travellers*’ outlines the various factors that contribute to driver stress. **Table 9-6** and **Table 9-7** below set out the DMRB guidance for assigning levels of driver stress using a three point scale of Low, Moderate or High.

Table 9-6: Assessment guidance for driver stress for dual carriageway roads

Average peak hourly flow lane, in flow Units/1 hour	Average Journey Speed km/hr		
	Under 60	60-80	Over 80
Under 1200	High	Moderate	Low
1200-1600	High	Moderate	Moderate
Over 1600	High	High	High

Table 9-7: Assessment guidance for driver stress for single carriageway roads

Average peak hourly flow lane, in flow Units/1 hour	Average Journey Speed km/hr		
	Under 50	50-70	Over 70
Under 600	High	Moderate	Low
600-800	High	Moderate	Moderate
Over 800	High	High	High

9.2.39 To support the ‘*A9 Dualling Programme Case For Investment*’ (Transport Scotland, 2016), Transport Scotland commissioned research which considered the impact of a lack of guaranteed overtaking opportunities on the A9 between Perth and Inverness on levels of driver frustration. This work concluded that there were a number of factors that contribute to driver frustration on this route, in particular:

- Not being able to drive at the desired speed
- Whether there is on-coming traffic
- Lack of overtaking opportunities
- The number of HGVs in the platoon ahead

9.2.40 The research concluded that the presence of these conditions along the single carriageway sections of the A9 between Perth and Inverness is contributing to driver frustration. Based upon the scale and prevalence of these factors along the route, the recommendation was that all projects forming part of the A9 Dualling Programme should be assessed as having at least a moderate level of driver frustration in the baseline, with a moderate to high level in areas where there are longer stretches of single carriageway without opportunities to overtake.

Limitations to Assessment

9.2.41 The baseline data used for this assessment has been gathered through a review of publicly available information, site visits and consultations, as noted under **paragraphs 9.2.3 to 9.2.6**.

9.2.42 A limitation to this assessment is regarding the numbers of NMUs utilising the identified access routes, as user counts have not been undertaken. Nonetheless, there is sufficient information to undertake a full DMRB Stage 3 EIA.

9.3 Baseline Conditions

9.3.1 The baseline conditions relating to NMUs and views from the road within the study area are described below. **Drawings 9.1 and 9.2 (Volume 3)** illustrate the baseline conditions for existing NMU provision and views from the road.

Non-Motorised Users (NMUs)

9.3.2 The following section outlines the NMU resources around the A9 in Project 7, which are also shown on **Drawing 9.1 (Volume 3)**. Where existing NMU routes are mentioned, these comprise of Core Paths, the National Cycle Network (NCN) route 7, informal routes and hill and Munro walks. The study area is located within an area of high landscape and ecological importance that attracts a wide variety of NMUs. **Table 9-8** below provides an overview of the NMU routes.

Table 9-8: NMU Reference Numbers

NMU Ref. No.	NMU Routes	Location
NMU1	NCN7 and Perth and Kinross Council (P&KC)/ Cairngorms National Park Authority (CNPA) Core Path as an off-road track parallel to the west of the A9	ch. 0 – 9,700
NMU2	Hill walking track to Meall na Leireach	ch. 350
NMU3	Hill walking track to Beinn Mholach and P&KC Asserted Right of Way to Annat	ch. 350
NMU4	Hill walking track to The Sow of Atholl/ Meall an Dobharchain	ch. 350
NMU5	General Wade's Military Road (Access Track)	ch. 500 – 2,975
NMU6	Hill walking track and Munro walk to Beinn Udlamain and Sgairneach Mhor	ch. 3,150
NMU7	Informal track from lay-by 83 that forms a track to a telecommunications mast	ch. 5,800
NMU8	Hill walking track and Munro walk from Balsporran Cottages to Geal Charn and A'Mharconaich	ch. 6825
NMU9	Hill walking track and Munro walk to A'Bhuidheanach and Carn Na Caim	ch. 20,550 (Project 8)

9.3.3 **Table 9-9** provides an overview of at-grade crossing points and their approximate locations by chainage (ch.).

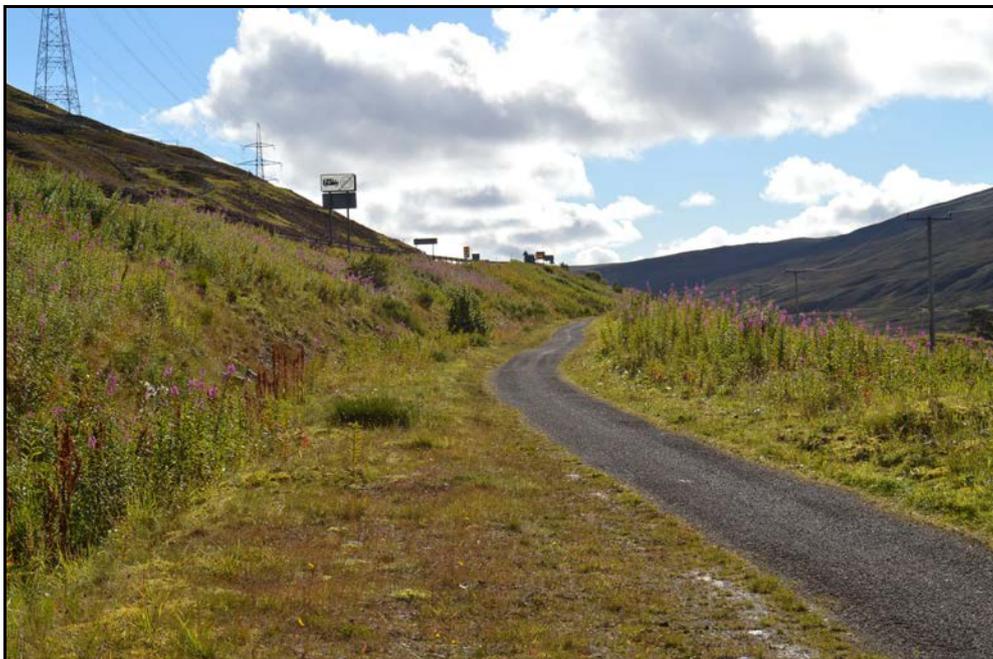
Table 9-9: NMU Crossing Point Reference Numbers

Crossing Point (CP) Ref. No.	Crossing Points	Location
CP1	Where NMU5 meets the A9 there is a crossing point to the Dalnaspidal Junction	ch. 500
CP2	CP at lay-by 79 from/ to NMU5 near Drumochter Pass	ch. 3,125
CP3	CP at lay-by 82 from/ to NMU1 and NMU6 near Drumochter Pass	ch. 3,950
CP4	CP from parking area at Balsporran to and from NMU9	ch. 6,775
CP5	CP at lay-by 85 to and from NMU9	ch. 6,800

Crossing Point (CP) Ref. No.	Crossing Points	Location
CP6	At-grade crossing of the A9 to access NMU9 hill walking track to two Munros, Carn a Caim and A'Bhuidheanach Bheag	ch. 20,550 (Project 8)

Detailed Description of NMU Routes and CPs

- 9.3.4 There are nine NMU routes within the Proposed Scheme extents. At the southern end of the Proposed Scheme, NMU1, which comprises the NCN7 (long distance cycle route) and CNPA Core Path, runs parallel to the A9, separated by an embankment (see **Photograph 9-1**). The settlement of Dalnaspidal lies to the west. NMU1 is shared with local vehicle access (on-road) for approximately 250m north of Dalnaspidal, where it then returns to an off-road facility for the remainder of the Proposed Scheme.



Photograph 9-1: Off-road NCN7 between the A9 and Dalnaspidal

- 9.3.5 Three hill walking routes, NMU2, 3 and 4, begin from the level crossing at Dalnaspidal (see **Photograph 9-2**). Within the study area, the routes follow the same track, and then separate out into three separate tracks (refer to **Drawing 9.1, Volume 3**). The Walk Highlands website advises NMUs accessing these hill routes to park in the space to the east of the level crossing, near Dalnaspidal Lodge, and demand for this has been confirmed through stakeholder consultation. The parking provision is informal with limited space available.



Photograph 9-2: Informal parking at Dalnaspidal

- 9.3.6 NMU5, General Wade’s Military Road, runs parallel to the east of the A9. The track serves as an access to the Dalnacardoch Estate as well as providing access to the SSE Beaully Denny Powerline (BDL). NMU5 also enables recreational use of the area, giving access for deer stalking and game shooting as well as long distance pony trekking, see **Photograph 9-3** below.



Photograph 9-3: NMU5, General Wade’s Military Road

- 9.3.7 NMU5 meets the A9 (southbound side) almost opposite the existing junction into Dalnaspidal. At this location there is a noted crossing demand; CP1 represents the existing at-grade crossing point. As well as connecting NMU1 to NMU5 this is also an informal stopping location for bus services to be flagged down. Consultation has also highlighted highland pony trekking in this area and highlighted riders’ desire for an equestrian crossing at this location.

- 9.3.8 NMU6 is a hill walking route leading to Sgairneach Mhor and Beinn Uldamenn Munros (see **Photograph 9-4**). The route utilises a railway underpass and covers two Munro summits, as well as connecting to the Sow of Atholl Corbett (NMU4). This forms part of a circular route that can be completed within a day; this is likely to make this a desirable route.
- 9.3.9 The Walk Highlands website suggests parking in the existing northbound lay-by 79; as shown on **Drawing 9.1 (Volume 3)**. Consultation has also indicated that the lay-bys within the vicinity of Drumochter Pass (including lay-by 79) are used for parking by visitors accessing the outdoors.



Photograph 9-4: NMU6 hill walking route to Sgairneach Mhor and Beinn Uldamenn Munros

- 9.3.10 CP2 is an at-grade crossing point from lay-by 79 and CP3 is an at-grade crossing point from lay-by 82. Consultation with NMU forum members suggests the demand for a crossing here is likely to be from hillwalkers, cyclists accessing NCN7 and winter sports enthusiasts (for example back country skiers) accessing Drumochter Pass.



Photograph 9-5: View of Drumochter Pass from lay-by 79

- 9.3.11 NMU7 is an informal NMU route that forms a track to a telecommunications mast near Balsporran. Access is possible at-grade from the A9 and there is an access gate at the back of northbound lay-by 83. The track is also used for access to the Highland Main Line (HML) railway, game keeping, shooting and stalking parties.
- 9.3.12 Drumochter Estate has indicated that in peak season (grouse shooting season, August to December) this access is used around ten times a week with 15 vehicles ingress/ egress at this point.
- 9.3.13 NMU8 is a hill walking track forming a circular route to two Munros, Geal Charn and A’Mharconaich. The route starts at Balsporran Cottages (Bed and Breakfast) at the level crossing of the HML railway (see **Photograph 9-6**). A car parking area is used by walkers, cyclists and drivers using the A9. It is not used by residents and visitors to Balsporran Cottages as they have their own parking at the cottages, west of the River Truim.



Photograph 9-6: View from Balsporran informal parking area toward Balsporran Cottages and NMU8, hill walking routes

- 9.3.14 CP4 is an at-grade crossing from the parking area at Balsporran Cottages. The crossing is used by hill walkers to connect to NMU9 to the east of the A9.
- 9.3.15 NMU9 is a hill walking and Munro walk to A’Bhuidheanach. The route begins within Project 8, to the north of the Proposed Scheme. As it ascends it orientates to the south and part of the walk is within the Proposed Scheme. The Walk Highlands website advises walkers to park at the lay-by south of the existing A9/ A889 Dalwhinnie Junction, understood to be lay-by 88 (within Project 8).
- 9.3.16 CP5 is an at-grade informal crossing point across the A9 from lay-by 85 to connect with hill walking route NMU9 within Project 8. Demand for this has been noted by the NMU Forum members.
- 9.3.17 Just north of Project 7, CP6 represents an at-grade crossing from lay-by 87 to the starting point of NMU9, where it meets the A9.

Disabled/ Vulnerable User Access

- 9.3.18 A group of users can be defined as ‘vulnerable’ in a number of ways, such as by the amount of protection from vehicles required (for example pedestrians and cyclists) or by the amount of task capability (e.g. the young and the elderly).
- 9.3.19 Throughout the Proposed Scheme, there are various NMU routes with different surfacing and gradients, some of which may make these routes more difficult for vulnerable user groups. Access to hill walking tracks for pushchairs and wheelchair users could be difficult due to steep inclines and uneven paths and surfacing in places.
- 9.3.20 NMU1 (NCN7) is very close to the A9 northbound carriageway in places, only separated by a narrow grass verge, sometimes with or without a low level post and steel wire rope fence (Vehicle Restraint System (VRS)), as shown in **Photograph 9-7**.
- 9.3.21 Such close proximity to the A9 occurs only in a few places within the Proposed Scheme and only for short stretches. However, being this close to fast moving traffic and large vehicles can make pedestrians, equestrians and cyclists feel vulnerable in those locations.



Photograph 9-7: NCN7 to the north of lay-by 79, separated from the A9 by grass verge and VRS

- 9.3.22 Some tracks start and finish at the A9; however, most are generally further away from the road for the majority of their length; therefore, they are more protected from traffic, except where users need to cross the A9 at-grade. Some users are particularly vulnerable to crossing the A9, such as equestrians.

Access to the Outdoors

- 9.3.23 Key outdoor areas accessible from NMU routes within Project 7 include the surrounding Munros and Corbetts, Loch Garry, NCN7 and the CNPA and P&KC Core Path network. These features can be seen on **Drawing 9.1 (Volume 3)**.

Vehicle Travellers

- 9.3.24 The A9 from Glen Garry to Dalwhinnie is characterised as a single carriageway section, 10km in length including tie-in areas at the southern and northern extents. The road passes through the CNP, including Drumochter Pass, and ends approximately 1.3km to the south of the existing A9/A889 Dalwhinnie Junction.

Local Access

- 9.3.25 There are 13 private accesses to private estates and other businesses/ properties; these are detailed further in **Chapter 8**.
- 9.3.26 Dalnaspidal Junction provides access to the Dalnaspidal Estate, six residential properties (see **Chapter 8**), the NCN7 and Core Path (NMU1), an informal parking area and access to hill walking routes (NMU2, 3 and 4).
- 9.3.27 Dalnaspidal can be accessed directly from the northbound carriageway of the A9; however, vehicles travelling southbound must turn right into Dalnaspidal and cross the northbound traffic, potentially holding up southbound traffic before they can cross the northbound carriageway. Similarly, vehicles exiting Dalnaspidal must cross the northbound carriageway to turn right.
- 9.3.28 General Wade's Military Road (NMU5) has one access point on the southbound carriageway; this provides access to the Dalnacardoch Estate and onto the hills to the east of the A9 corridor.
- 9.3.29 Access to Balsporran Cottages is via an access point on the northbound carriageway, which also provides access to a parking area and hillwalking route NMU8. Right turn manoeuvres to/ from the southbound carriageway require vehicles to cross the northbound.
- 9.3.30 Drumochter Lodge is accessed directly off the southbound carriageway. This provides access to Drumochter Estate buildings and worker residencies. Drumochter Lodge is currently tenanted by the Game and Wildlife Conservation Trust. Right turn manoeuvres to/ from the northbound carriageway require vehicles to cross the southbound.
- 9.3.31 Several other minor access points on the A9 are located within the Proposed Scheme; refer to **Chapter 8** for details.

Parking Provision

- 9.3.32 There are currently ten lay-bys within the Proposed Scheme, five on each of the northbound and southbound carriageways; these are indicated on **Drawing 9.1 (Volume 3)**. Lay-bys can be defined as type A or type B; type A lay-bys include a segregation strip from the carriageway, whereas type B lay-bys are roadside bays with no physical separation from the carriageway.
- 9.3.33 Lay-bys are important for drivers needing to stop, generally for a short time. It is apparent that many NMUs utilise lay-bys for access to hill walking routes and Munro tracks, with many NMU organisations recommending the use of lay-bys for parking. Lay-bys may also be provided for more specialised functions, such as emergency lay-bys for broken down vehicles, bus lay-bys or hardstandings where maintenance vehicles may pull off the road.
- 9.3.34 Specifically, consultation with NMU groups has highlighted use of Drumochter Pass lay-bys 81 and 82, see **Drawing 9.1 (Volume 3)**. Both of these are type A lay-bys and are set back from the road providing parking spaces and information boards about the area. These lay-bys provide important safe stopping places for users to experience views of the area and access NMU routes; these are popular stopping places with tourists stopping to take photographs.

9.3.35 As well as lay-bys being used as informal parking areas the following locations within the Proposed Scheme extent are also used as parking areas:

- Informal parking at Dalnaspidal on the south-east side of the HML railway, used to access hill walking tracks to the west
- Informal parking to the east of Station House and Station Cottages, adjacent to the NCN7
- Parking area at Balsporran Cottages, used to access hill walking tracks to the west (see **Photograph 9-8**)



Photograph 9-8: Parking area at Balsporran Cottages with access to hill waking routes

Public Transport

Rail Services

9.3.36 The HML railway runs approximately parallel with the A9 for much of the Proposed Scheme extent. No rail services stop within the extent of the Proposed Scheme, with the nearest station being to the north at Dalwhinnie. There is an existing level crossing at Dalnaspidal for vehicles and NMUs. Tourists and visitors cannot drive across the level crossing without prior authorisation. There is another level crossing at Balsporran used by hillwalkers to access NMU8. There are also crossing points under and over the railway line at NMU6 and NMU7 respectively.

Bus Services

9.3.37 As well as bus services being used for access to northern Scotland and by local communities, the A9 corridor is also popular with tourists and many coach trips use the road to access the Whisky Trail and the CNP. Four bus and coach services stop at Dalnaspidal; however, there is no formal bus stop at this location. Passengers currently flag down the bus services on the north and southbound carriageways; consultation with local stakeholders has suggested that this occurs infrequently.

9.3.38 **Table 9-10** shows the services which can be flagged down by passengers on both sides of the A9 near Dalnaspidal.

Table 9-10: *Bus services serving Dalnaspidal*

Service Number	Operator	Comments
Number 226 Arbroath to Fort William	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Runs Tuesday, fortnightly return service March to October, with no winter service.
Number 228 Arbroath to Inverness	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at road end/ A9 Junction. Runs Thursday, fortnightly return service March to October, with no winter service.
Number 242 Forfar to Fort William	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Runs Tuesday, fortnightly return service March to October, with no winter service.
Number 244 Forfar to Inverness	Fisher Tours of Dundee running 'Scottish Express' tours primarily aimed at tourists.	Bus stops at road end/ A9 Junction. Runs Thursday, fortnightly return service March to October, with no winter service.

Views from the Road

9.3.39 **Chapter 14** includes Lay-by Viewpoints A-H (**Drawings 14.28 - 14.37, Volume 3**). These drawings should be read in conjunction with the views from the road section.

9.3.40 Key features visible from the road includes the following:

- Mountain ranges to the east of the A9 including the summits of Glas Mheall Beag, Glas Mheall Mor, A'Bhuidheanach Bheag and Carn na Caim
- Mountain ranges to the west of the A9 including summits of Meall na Leitreach, Meallan Budhe, The Sow of Atholl/ Meall an Dobharchaibn, An Torc/ Boar of Badenoch, A'Mharconaich, Geal Charn and Creagan Mor
- Balsporran Cottages
- Beauly to Denny High Voltage Transmission Line infrastructure (BDL)
- HML railway
- Loch Garry and River Garry
- River Truim and its tributaries
- Woodland features, including coniferous plantations and snow belts

9.3.41 Views from the road are transient in nature, but can add to the experience for vehicle travellers. As the majority of the Proposed Scheme sits within the CNP and travellers can enjoy high value views, views from the road are assigned a Medium sensitivity.

9.3.42 To the south of Project 7, views west for northbound vehicles encompass the settlement of Dalnaspidal. The topography falls away from the road and long distance views to Loch Garry are visible. There are dramatic views north-west of Dalnaspidal of the mountains around Drumochter Pass. The views around Dalnaspidal are open, at times intermittent due to coniferous woodland surrounding the settlement. For southbound travellers high value views towards Loch Garry are possible on the approach to Dalnaspidal, with most of the settlement hidden behind coniferous vegetation.

9.3.43 The high value views west continue when travelling northbound, views east are more restricted with the road in cutting. Blocks of coniferous woodland further screen wider views east creating

restricted views, there are glimpses of the BDL beyond this vegetation; see Lay-by Viewpoint B (**Drawing 14.29, Volume 3**).

- 9.3.44 At approximate ch. 2,000, on the northbound approach to NMU6, there are open views west across the strath with the Allt Dubhaig (a watercourse) meandering through. The hill track NMU6 can be seen winding between the peaks of An Torc and The Sow of Atholl. NMU1 (NCN7) is visible to the west of the road. Southbound travellers get a similar experience on the southbound approach.
- 9.3.45 The Drumochter Pass is a dramatic landscape through which the A9 passes, with open views through this section of the route. NMU1 and the HML railway are visible to the west of the road, with heather and rough grassland visible to the edge of the mountains. The BDL is highly visible to the east, elevated above the road; see Lay-by Viewpoints E, North and South (**Drawing 14.33 and 14.34, Volume 3**).
- 9.3.46 On the northbound approach to Balsporran views are generally open. Balsporran Cottage is highly visible from the road, with coniferous plantation visible beyond. Coniferous plantation also surrounds Drumochter Lodge to the east of the A9. North of Drumochter Lodge the coniferous plantation to the east continues to the end of the Project 7 extent, gaps in the tree belt allow intermittent views in this direction. For southbound travellers Balsporran Cottage is not visible until south of Drumochter Lodge, with the coniferous vegetation to the east and west screening views south.
- 9.3.47 Toward the northern end of Project 7, views west remain open across the floodplain; with the HML railway and NMU1 visible across this landscape, see Lay-by Viewpoints F and G (**Drawings 14.35 and 14.36, Volume 3**).

Driver Stress

- 9.3.48 One of the scheme objectives of the A9 Dualling Programme is reducing driver stress. The assessment of driver stress is based on the traffic and road conditions likely to be encountered and the certainty of the route in question for travellers. The following factors are considered in relation to driver stress:
- Traffic flows
 - Journey speed
 - Frustration
- 9.3.49 The A9 is utilised by a combination of vehicle types, including passenger vehicles, coaches and heavy goods vehicles (HGVs), serving strategic, local, agricultural, and commercial and tourist traffic. In addition, the tourism industry contributes to a significant traffic volume along the length of the route during summer months and holidays.
- 9.3.50 Journey time reliability can be unpredictable along the A9. Driver frustration, due to a lack of safe overtaking opportunities, is considered to contribute to a higher than average rate of serious and fatal accidents.
- 9.3.51 **Table 9-11** and **Table 9-12** below set out traffic data and flow information collected in 2015. Note that the average speed shown below will be influenced by the introduction of average speed cameras along the single carriageway sections the A9.

Table 9-11: 2015 traffic data relating to south of Dalnaspidal

	Hourly flow per lane	Average speed km/hr
Northbound	180	88
Southbound	193	89

Table 9-12: 2015 traffic data relating to north of Dalnaspidal

	Hourly flow per lane	Average speed km/hr
Northbound	180	87
Southbound	193	78

9.3.52 **Table 9-13** below shows the proportion of vehicles using the A9 at the Dalnaspidal Junction.

Table 9-13: 2015 average vehicle type proportions at the A9/ Dalnaspidal Junction

	0700 – 1000 hrs	1000 – 1600 hrs	1600 – 1900 hrs
Car	59%	67%	75%
LGV	20%	14%	9%
HGV	21%	29%	15%

9.3.53 Based on DMRB methodology outlined within **Table 9-6** and **Table 9-7** and the information above in **Table 9-11** and **Table 9-12**, driver stress for vehicle users on northbound and southbound carriageways to the north and south of Dalwhinnie are assessed as being Low. Although that may be the case based on these figures, we know that other factors come into play, adding to driver frustration.

9.3.54 Therefore, taking into consideration the commissioned research by Transport Scotland, described previously, Driver Stress for the whole of the Proposed Scheme is defined as **Moderate** due to the potential number of slower moving vehicles, with no available overtaking opportunities.

NMU Baseline Summary

9.3.55 There are nine NMU routes within the Proposed Scheme comprising of Core Paths, NCN7, hill walking routes and informal routes. These routes intersect the A9 at five locations, referred to as crossing points (CPs); all of these existing crossing points are at-grade. The existing NMU routes and CPs are illustrated on **Drawing 9.1 (Volume 3)**.

9.3.56 NMU routes 1-8 are located within the 1km study area and are therefore assessed in this chapter. NMU9 is located outside of this area and is not therefore further assessed. As all the crossing points identified in the Proposed Scheme are at-grade, these will all be removed as part of the Proposed Scheme. Therefore crossing points were assessed in relation to the NMU route associated with it and considered as part of the amenity impact and journey length impact assessments.

9.3.57 Where there is an anticipated change in journey length, either adverse or beneficial, a JLA has been calculated. The JLA locations are shown on **Drawings 9.4 - 9.7 (Volume 3)** and assessed in **section 9.4** below.

9.3.58 **Table 9-14** below lists the key NMU routes that have been assessed and their assigned sensitivity.

Table 9-14: Key NMU routes to assess

NMU Ref. No.	Type of NMU	Baseline Amenity	Link to Outdoor Access Areas	Sensitivity
NMU1	NCN7 and CNPA Core Path	Cycle way which follows an off-road track separated from the A9 throughout the whole of the Proposed Scheme. The A9 is highly visible for the majority of the route. Track is mostly tarmac.	Not applicable	High
NMU2	Hill walking track	Gravel track with partial views of the A9	Loch Garry and Meall na Leitreach Munro	High
NMU3	Hill walking track and P&KC Asserted Right of Way	Gravel track with partial views of the A9	Beinn Mholach Munro	High
NMU4	Hill walking track	Gravel track with partial views of the A9	Meall an Dobharchain Munro and Sow of Atholl Corbett	High
NMU5	General Wade's Military Road	Gravel track, an existing plantation woodland conceals views of the A9 from this track	N/A	Medium
NMU6	Hill walking track	Gravel track, views back toward the HML railway and the A9 are possible.	Beinn Udlamain and Sgairneach Mhor Munros	High
NMU7	Informal track	Gravel track, views of the A9 and HML railway are possible	N/A	Low
NMU8	Hill walking track	Gravel track, extensive views from high up taking in the A9 and surrounding landscape	Geal Charn and A'Mharconaich Munros	High

9.4 Potential Impacts

9.4.1 This section considers the potential temporary (construction) and permanent (operational year 1) impacts of the Proposed Scheme on NMUs and Vehicle Travellers.

9.4.2 Throughout the DMRB Stage 3 iterative design process, a number of environmentally led workshops considered each aspect of the developing design and made recommendations for certain features to be included in the design. These aspects have been defined as 'embedded mitigation' and, where they are included in the Proposed Scheme design, they are considered within the context of the impact assessment as providing mitigation to avoid or reduce environmental impacts, and in some cases, provide environmental benefits.

9.4.3 The embedded mitigation providing continued and potentially improved NMU access includes the following:

- Removal of all existing at-grade pedestrian crossings of the A9, rationalising and replacing with underpass crossings, improving NMU safety
- Removal of all right turn manoeuvres across the carriageways, improving road safety

- Local realignment of NCN7 (NMU1) where affected by the Proposed Scheme, at various locations throughout Project 7
- Dalnaspidal Junction underpass at ch. 500 for residents, estate vehicles and NMUs
- Locally realigned route for NMU5 from ch. 500
- Type A lay-by at Dalnaspidal, with enlarged segregation strip and footpath link to the NCN7
- Improved junction for Balsporran Cottages and improved car park facilities, improving road safety and access to NMU provisions
- Northbound and southbound Type A lay-bys at Drumochter with enlarged segregation strip and potential links to the surrounding NMU network
- Allt A'Chaorainn underpass at approx. ch. 3,020 for estate access and NMUs
- Drumochter Pass NMU link from southbound Type A lay-by to Allt A'Chaorainn underpass
- Drumochter underpass at ch. 7,570 for residents, estate vehicles and NMUs
- Proposed estate access route to the east of the A9 from Drumochter Lodge, which links the NCN7 and hill walking route NMU9

9.4.4 Embedded mitigation specific to views from the road has also been developed through the environmentally-led design process, with input from Landscape Architects; including:

- Landform refinement, mainly of the embankments of the mainline and junction proposals, adjoining the proposed road to the surrounding landscape
- Design of access tracks/ realigned NMU routes
- Design of sustainable drainage solutions (SuDS)
- Design of rock cuts
- Design of retaining walls and other structures

9.4.5 While the impact assessment is undertaken in cognisance of the embedded mitigation features noted above, in order to ensure that all project mitigation requirements (including embedded, specific and generic mitigation) are captured, they have been included within the summary of mitigation section of this chapter, and the Schedule of Environmental Commitments contained in **Chapter 21**.

Non-Motorised Users (NMUs)

Temporary – Construction Phase

- 9.4.6 NMU routes will be affected during construction; these effects will be temporary and will primarily affect NMU routes with direct access to/ from the existing A9 or crossing the existing A9. Phasing of the works will reduce the temporary effects on NMU routes as much as possible.
- 9.4.7 Where necessary, temporary diversions and alternative access will be provided to allow use of the NMU network during the construction phase. Details, including the timing and exact routes of diversions, will be dependent upon the arrangements of the Contractor; therefore, this information is not available at this time.

- 9.4.8 Typically, in the absence of mitigation, there will be adverse impacts on the amenity value and journey length of NMUs during the construction phase. Likely impacts include the following:
- Temporary diversions of NMU routes
 - Alternative access points for NMU routes and potential severance of access to NMU routes from the A9
 - Construction traffic on local roads and off-road NMU routes creating an increase in traffic around pedestrian areas
 - Effects on the visual amenity of NMU routes close to construction work
 - Increase in noise levels – where the NMU receptor is within approximately 75m of construction activities there could be potential temporary impacts associated with localised works (this distance has been defined by the professional judgement of the topic specialist, further details on construction noise impacts can be found in **Chapter 17**)
- 9.4.9 There are six NMU routes likely to be affected during construction; as set out below. Given limited detail on construction phasing and diversions, consideration of impacts cannot take into account specific details of potential increases/ decreases in journey times.
- 9.4.10 NMU1 (NCN7 and CNPA Core Path), runs adjacent to the existing A9 for the majority of the Proposed Scheme. During construction, the majority of this route through the Proposed Scheme would be closed; however, it is expected that any necessary closures would be phased in sections, in line with the appointed Contractor's construction works schedule. The impact on NMU1 is considered to be **Substantial**, given the anticipated closures along the route and potentially major impacts on amenity value, due to the close proximity to the works.
- 9.4.11 NMU2, 3 and 4 can be accessed from Dalnaspidal. During construction, access to Dalnaspidal will be maintained; however, there will likely be some effect on the ease of access to these NMU routes as there will be periods of disruption between the existing A9 and the HML railway.
- 9.4.12 Close to the A9 there would likely be a Moderate adverse effect on the amenity value of all three NMU routes, notably from increased noise levels and impact on visual amenity. Overall there is likely to be a **Moderate/ Slight adverse** impact on these NMU routes during construction, notably during construction of the Dalnaspidal Junction. This is not considered to be significant however, as access will be maintained by the Contractor throughout the duration of this section of the works, to accommodate residents in Dalnaspidal.
- 9.4.13 It is also anticipated that there will be limited access to the two informal parking areas at Dalnaspidal during construction of the junction and slip road. This is anticipated to be for a limited period and will be dependent on how construction is phased.
- 9.4.14 During construction alternative access to NMU5 will be provided, with a temporary bridge structure over the Allt Coire Mhic-Sith. Details on how this route could be safely accessed by NMUs during construction will be dependent upon the arrangements of the Contractor. There is likely to be an increase in journey length of approximately 191m as well as adverse effects on noise levels and visual amenity due to loss of vegetation between NMU5 and the A9. Therefore, during construction, there would be a **Moderate adverse** impact on NMU5, which is a significant impact.
- 9.4.15 Hill walking track NMU6, to the west of the A9, is usually accessed from northbound lay-by 81 and by walking along NMU1. As NMU1 will be closed at times, alternative access would have to

be provided by the Contractor. Given there are no major structures or infrastructure around this area, it is likely that access to NMU6 would be restricted/ closed for short periods only. Therefore, during construction, there would be a **Moderate adverse** impact on NMU6; this is a significant impact.

- 9.4.16 Access to NMU7 is likely to be limited during construction of the northbound carriageway, off which this route is currently accessed. Dependent upon phasing of construction there is likely to be a temporary period with no formal access to this route; therefore, there will be a **Moderate adverse** impact which is considered to be significant.
- 9.4.17 Access to Balsporran Cottages will be maintained through the construction period. During upgrading works to the existing car park area, access to NMU8 could be limited, with potential for restricted parking provision. It is considered that there will be no impact on journey length. Impacts on the amenity value are concentrated around the road, mostly affecting the quality of views and the noise levels; overall there will be a **Slight adverse** impact on NMU8, which is not significant.

Permanent – Operational Phase

- 9.4.18 NMU routes have been considered during the design process, including the wider connectivity of routes, in order to retain NMU connectivity through the Project 7 extents. For the NMU provisions within the Proposed Scheme, journey length and accessibility, and amenity have been assessed separately and then, using the methodology set out in **section 9.2**, an overall significance of potential impact has been assigned. The impacts set out below are based on worst case scenario and therefore determine impacts at year 1. Unless stated otherwise, all impacts are adverse.

Journey Length and Accessibility

- 9.4.19 This assessment has identified five locations where there would be a change in journey length upon operation of the Proposed Scheme. A journey length assessment (JLA) has been carried out in these locations. There are no anticipated changes in journey length identified for NMU2, 3, 4, 6, 7 and 8; however, where there are alterations to access this is also discussed below.
- 9.4.20 Five changes to journey length are identified for NMU1. These are shown on **Drawings 9.4 to 9.7 (Volume 3)** as JLA1a to JLA1e. In order to assess the total potential change in journey length, the results from JLA1a to JLA1e were amalgamated. This results in an overall increase of 270m. Using the methodology set out in **Table 9-2**, there are no areas of community land (**Chapter 8**) therefore the magnitude of change for NMU1 is **negligible**. As the route is attributed a **high** sensitivity this results in an overall **Slight adverse** impact given the minor alterations to this NMU route.
- 9.4.21 A change in journey length has also been identified for NMU5, with a potential new journey length of 353m, an increase of 166m. As this alteration is not affecting access to community land, the magnitude of change is considered **negligible**. This route has a **medium** sensitivity therefore the overall impact is **Negligible/ Slight adverse**.
- 9.4.22 There is no change in journey length for NMU2, 3 and 4. Given the improvements in access provided by the Dalnaspidal Junction, Type A lay-by and NMU link there would be a **Moderate beneficial** impact on these NMU routes.

- 9.4.23 There will be a **Moderate beneficial** impact on NMU6 with northbound and southbound Type A lay-bys offering improved stopping facilities for NMUs, with an NMU link and underpass providing access to NMU6 from the southbound carriageway.
- 9.4.24 There is no change in journey length for NMU7; similarly, there will be no change for NMUs accessing this route via foot or bike. NMUs accessing this route via car would need to use the new Balsporran/ Drumochter Junction. Therefore, it is anticipated there would be a **Negligible** impact on journey length and accessibility for NMU7.
- 9.4.25 There is also no change in journey length for NMU8. Access to NMU8 for NMUs can be achieved via the NCN7 from the north and south. The NCN7 connects to the Balsporran link road providing improved access for NMUs with increased separation from the A9 traffic. NMUs accessing this route by car would need to use the proposed Balsporran/ Drumochter Junction, although this would be a slight increase in journey time to access this route the junction provides a much safer access with improved car parking facilities. It is considered that for NMUs there will be a **Slight beneficial** impact on accessibility for NMU8.
- 9.4.26 **Table 9-15** summarises the potential impacts, without additional mitigation, for changes to journey length. Unless stated otherwise, all effects are adverse.

Table 9-15: Journey Length Assessment (without mitigation) Operational Phase

JLA Point	NMU Ref.	CP Ref.	NMU type	Key Impact on NMU	Baseline Journey Length (m)	Potential New Journey Length (m)	Potential Change (m)	Sensitivity	Potential Impact	
									Magnitude	Significance
JLA1a-e	NMU1	CP1-5	NCN7	Local realignment of NCN7 throughout the Proposed Scheme	2,761	3,031	+270 (3,031-2,761 = 270)	High	Negligible	Slight
JLA2	NMU5	CP1	Informal route	Local realignment at Dalnaspidal Junction	187	353	+166 (353-187 = 166)	Medium	Negligible	Negligible/Slight

Amenity

- 9.4.27 As stated within **paragraphs 9.2.17 - 9.2.22** the assessment of impacts on amenity value has taken into consideration any potential changes in safety (as a result of increased traffic flows), noise levels, air quality and visual amenity in order to assess the overall impact on amenity without mitigation.
- 9.4.28 Topic specialists for the Noise, Air Quality and Visual Chapters have informed the assessment to fully consider any changes in amenity, with the associated data provided in **Appendix 9-1 (Volume 2)**. Visual impacts were based on extent of the Proposed Scheme visible and any loss or increase in tree cover, and impacts relating to safety and increased traffic flows were based on predicted traffic data and changes to CPs (i.e. change from at-grade crossings).
- 9.4.29 NMU1 will experience a Moderate adverse change in visual amenity (at year one), notably around the approach to Balsporran Cottages and Drumochter lodge where a loss of established vegetation will be apparent. Visual changes will be noticeable as well as where the path runs adjacent to the proposed retaining wall between ch. 5,100-5,800, refer to **Figure 9.1** below. This figure is a screenshot from the 3D rendered model to demonstrate this feature, however, this model has limitations and this visualisation is indicative.

- 9.4.30 It is anticipated that any changes in noise levels and air quality will be Negligible. There will be a slight beneficial change in safety as there will be two short stretches where there is increased separation between the NCN7 and the A9. Overall the impact on NMU1 is **Moderate/ Slight adverse**.



Figure 9.1: The retaining wall and barrier forms a boundary to NMU1 (NCN7)

- 9.4.31 NMU2, 3 and 4 will experience Slight adverse changes in visual amenity. These potential changes are focused at the new junction and slip road into Dalnaspidal. Further away, views of the Proposed Scheme will be possible but it will not be the dominant view. There is no requirement to cross the A9 to access these NMU routes, given the improved junction it is anticipated there would be a Slight beneficial change in safety. There is potential for Substantial/ Moderate beneficial impacts if NMUs access these routes from the east due to the proposed underpass. However, the worst case scenario is assessed and therefore a Slight beneficial change in safety is used to inform the overall amenity impact. Any change in noise level and air quality is likely to be negligible. Overall the impact on these NMUs is **Slight adverse/ Negligible**.
- 9.4.32 Removal of the existing at-grade CP1, and inclusion of a shared underpass crossing, will result in a Substantial/ Moderate beneficial impact on safety for NMU5. There will be large areas of tree loss resulting from the Proposed Scheme therefore potential changes in visual amenity are likely to be Substantial/ Moderate adverse at year one when winter resilience planting and other vegetation has not yet established. There is anticipated to be minor change in noise levels due to the proximity to the road and negligible change in air quality. Overall the impact on NMU5 is **Moderate/ Slight adverse**.
- 9.4.33 There will be a negligible impact on visual amenity for NMU6, looking east; views of the HML railway and the A9 are prominent, but the change in this view will be minimal. There is likely to be a negligible change in noise, air quality levels and safety. Overall the impact on NMU6 is **Negligible**. There will be no change to safety (traffic flows) for NMU7. The change in noise levels and air quality will be Negligible and there will be a Slight adverse impact on visual amenity as the retaining wall and parapet separating the A9 and NCN7 will be visible. Overall the impact on the amenity value of NMU7 is considered to be **Slight adverse/ Negligible**.
- 9.4.34 NMU8 will experience a Moderate/ Slight change in visual amenity, with glimpsed views of the A9 from NMU8 at the level crossing, with wider views of the A9 possible as the footpath ascends.

Winter resilience planting on the southbound side of the A9 will be visible but will not yet be established (at year one) to screen views. The impact on noise levels, air quality and safety will be Negligible. Overall the impact on NMU8 is **Slight adverse/ Negligible**.

9.4.35 **Table 9-16** summarises the potential impacts, without additional mitigation, for changes to amenity value. Unless stated otherwise, all effects are adverse.

Table 9-16: *Amenity value (without mitigation)*

NMU Ref.	Type of NMU	Potential Change				Significance
		Safety	Visual (Year 1)	Air Quality	Noise	
NMU1	NCN7 and CNPA Core Path	Slight beneficial	Moderate	Negligible	Negligible	Moderate/ Slight
NMU2	Hill walking track	Slight beneficial	Slight	Negligible	Negligible	Slight/ Negligible
NMU3	Hill walking track and P&KC Asserted Right of Way	Slight beneficial	Slight	Negligible	Negligible	Slight/ Negligible
NMU4	Hill walking track	Slight beneficial	Slight	Negligible	Negligible	Slight/ Negligible
NMU5	General Wade's Military Road	Substantial/ Moderate beneficial	Substantial/ Moderate	Negligible	Minor	Moderate/ Slight
NMU6	Hill walking track	Negligible	Negligible	Negligible	Negligible	Negligible
NMU7	Informal track	Negligible	Slight	Negligible	Negligible	Slight/ Negligible
NMU8	Hill walking track	Negligible	Moderate/ Slight	Negligible	Negligible	Slight

9.4.36 **Table 9-17** below identifies the overall impact on NMUs. As defined in **paragraph 9.2.26**, an equal weighting is given to amenity impacts and journey length impacts. Unless stated otherwise, all impacts are adverse.

Table 9-17: *Summary of potential impacts on NMU (without mitigation)*

NMU Ref.	Significance of Potential Impacts		
	Amenity Value	Journey Length	Overall
NMU1	Moderate/ Slight	Slight	Moderate/ Slight
NMU2	Slight/ Negligible	Moderate beneficial	Slight beneficial
NMU3	Slight/ Negligible	Moderate beneficial	Slight beneficial
NMU4	Slight/ Negligible	Moderate beneficial	Slight beneficial
NMU5	Moderate/ Slight	Slight/ Negligible	Moderate/ Slight
NMU6	Negligible	Moderate beneficial	Slight beneficial
NMU7	Slight/ Negligible	Negligible	Slight/ Negligible
NMU8	Slight	Slight beneficial	Slight/ Negligible

9.4.37 In the absence of mitigation there will be a **Moderate adverse** impact on NMU1 without mitigation; this is **significant**.

9.4.38 There will be a **Moderate/ Slight adverse** impact on NMU5 without mitigation. This impact is considered to be **significant** taking into consideration the Substantial/ Moderate impact on visual amenity due to loss of vegetation to the existing tree belt separating the A9 and NMU5.

- 9.4.39 There will be localised areas of significant beneficial impacts arising from the removal of at-grade crossings which have been rationalised to three proposed underpasses. This provides a significant beneficial impact on the connectivity of the NMU network within the Project 7 extents.

Public Transport

Temporary - Construction Phase

- 9.4.40 As there are currently no formal bus stops for public transport, and as the existing A9 will remain open, there will be **no change** to public transport during construction.

Permanent – Operational Phase

- 9.4.41 There are currently four services that can be flagged down by passengers close to Dalnaspidal. The Proposed Scheme does not introduce bus stop lay-bys at Dalnaspidal; therefore, there will be **no change** to public transport.

Access to the Outdoors

Temporary - Construction Phase

- 9.4.42 The assessment of impacts on access to outdoor areas identified in **paragraph 9.3.29** was based on the impacts identified on NMU routes from the methodology set out in **section 9.2**. Access to Corbetts Meall na Leitreach, Beinn Mholach and Meall an Dobharchain/ Sow of Atholl and Loch Garry can all be accessed from NMU2, 3 and 4 respectively. Access to Dalnaspidal will be retained; however, it is anticipated there will be some disruption to these routes between the existing A9 and the HML railway. Therefore, there is likely to be a **Moderate/ Slight adverse** impact on access. However, there will be no impact on access from the west, beyond the HML railway level crossing.

- 9.4.43 There will be limited access to Munros Beinn Udlamain and Sgairneach Mhor. Although the track will remain open, access to NMU6 will be limited during construction of the northbound carriageway; it is likely that access to NMU6 would be restricted/ closed for short periods only. Therefore, it is anticipated there will be **Moderate adverse** impacts on the access to these Munros. During construction, as NMU8 will still be accessible from Balsporran Cottages, there will be **no impact** on access to Geal Charn and A'Mharconaich Munro.

Permanent – Operational Phase

- 9.4.44 Upon operation, there will be **no change** to access for Corbetts Meall na Leitreach, Beinn Mholach and Meall an Dobharchain/ Sow of Atholl and to Loch Garry.
- 9.4.45 Access to Munros Beinn Udlamain and Sgairneach Mhor is achieved from NMU6; there will be **Slight beneficial** impact given the Type A lay-bys on the north and southbound carriageways which offer safer rest stops with links to NMU6. A proposed NMU link and underpass allows for safe access from the southbound carriageway to NMU6.
- 9.4.46 Munros Geal Charn and A'Mharconaich are accessed from NMU8 at Balsporran Cottages. There is improved vehicle access to this NMU route and improved car parking facilities at Balsporran. Overall there is a **Slight beneficial** impact on access to these Munros.

Compliance with A9 Dualling NMU Access Strategy Aims

- 9.4.47 The Proposed Scheme complies with the route-wide objectives set out within the Access Strategy, including the removal of at-grade crossings, avoiding permanent severance of recognised routes such as Core Paths, and rationalisation of crossing points.
- 9.4.48 The Proposed Scheme has also taken into consideration opportunities identified in the Access Study and includes additional NMU connections from Type A lay-bys. The Access Study also informed the proposed underpass locations and alternative access provisions which are therefore considered as embedded mitigation within the Proposed Scheme. It also takes into consideration the project specific access study.

Vehicle Travellers - Views from the Road

Temporary - Construction Phase

- 9.4.49 There will be adverse impacts on views from the road during the construction phase including views of plant, bare earthworks, rock cuts, temporary signage, temporary structures, temporary SuDS, loss of roadside vegetation and areas for material storage which could detract from the views of the surrounding high value scenery. Notably, there will be significant temporary effects around Dalnaspidal Junction (between ch. 200 to ch. 1000), between ch. 5,900 to ch. 7,700 encompassing proposed SuDS features, Balsporran access and the Drumochter underpass.
- 9.4.50 There are likely to be **Moderate adverse** impacts on views from the road concentrated in these areas. These impacts would be temporary and the timing of these would be dependent upon the phasing of the construction works by the Contractor.

Permanent – Operational Phase

- 9.4.51 Views from the road are transient in nature but can add to the experience for vehicle travellers. Generally, vehicle travellers have a Medium sensitivity and a Medium susceptibility to change (see **Chapter 14**).
- 9.4.52 Generally, throughout Project 7, open long-distance views looking west will not be changed as a result of the Proposed Scheme. However, there will be some notable changes in specific areas; these are detailed below for operation year 1.
- 9.4.53 Screen shots from the 3D rendered model are used below to represent views from the road under the Proposed Scheme. Limitations to the model, such as not fully showing the surrounding landscape mitigation context or barriers at the edge of the road, mean that these images are indicative visualisations; however, they do help indicate where views may change.
- 9.4.54 Changes in the view from the road will be notable at Dalnaspidal, between approximate ch. -250 and ch. 650. On the approach to Dalnaspidal there are open views to the west encompassing the settlement of Dalnaspidal, coniferous tree planting, long distance views to Loch Garry and the southern slopes of Drumochter Pass. The slip road, proposed NMU track and SuDS features will be partially visible from the mainline; these views will be more prominent for vehicles travellers on the northbound carriageway (**Figure 9.2**). To the west the road is in cutting, views of the slip road will be possible, which will be particularly visible to vehicles travelling south (**Figure 9.3**). At year one, some scrub vegetation and seeding will help to blend embankments and SuDS features into the landscape, however winter resilience and other native tree planting will not yet be established.

- 9.4.55 Considering the context of views, encompassing the settlement of Dalnaspidal, at year one there is likely to be a **Slight adverse** impact on views from the road around Dalnaspidal.



Figure 9.2: Indicative view from the southbound lay-by across Dalnaspidal to Loch Garry



Figure 9.3: Indicative view from the southbound lay-by across Dalnaspidal to Loch Garry

- 9.4.56 Through Drumochter Pass there are constraints on available land where the A9, HML railway and NCN7 run adjacent to one another. A retaining wall and barrier will be put in place along the west side of the northbound carriageway to allow for the provision of the NCN7 between approximate ch. 4,900 and 5,800. This barrier will impact views from the road, notably for vehicle travellers on the northbound carriageway, as this could detract from the surrounding high quality landscape. Through Drumochter Pass the alignment lies to the east of the existing A9, which will slightly increase cutting into the embankments to the east of the road. It is anticipated there will be a **Moderate/ Slight adverse** impact. This impact is not considered to be significant given there will be no further impact on the surrounding high value views to the west and given the transient nature of views from the road. Views east will not fundamentally change and remain restricted due to the surrounding topography.



Figure 9.4: Indicative view north-west from the northbound carriageway

- 9.4.57 Changes will also be noticeable on the approach to Balsporran Cottages; SuDS features between ch. 5,900 and ch. 7,000, to the west of the A9, will be particularly visible for vehicle travellers on the northbound carriageway. There will likely be partial views of the improved car park at Balsporran. Native tree planting to the east of the A9 and scattered trees to the west will not yet be established at year 1. Overall there is likely to be a **Slight** impact on views from the road.
- 9.4.58 Around Drumochter Lodge there will be changes to the view from the road. There will be loss of established coniferous vegetation to the east and west of the carriageway between ch. 7,200 and 7,800. In the absence of mitigation there will be a **Moderate adverse** impact on views from the road as there is a loss of notable landscape features and additional infrastructure of the junction will be more prominent to the west.



Figure 9.5: Indicative view north from the northbound carriageway on the approach to Drumochter Lodge

Vehicle Travellers - Driver Stress

Temporary - Construction Phase

- 9.4.59 It is anticipated that during construction there is likely to be some adverse impacts on driver stress, this would primarily be due to reduced speeds. Potential overtaking opportunities and access to laybys would be dependent on how the contractor phases the construction. Given the existing scenario has limited overtaking and a reduced speed for HGV's this is not likely to be a significant adverse impact on driver stress during this time.

Permanent – Operational Phase

- 9.4.60 The Proposed Scheme projected flows and speeds for years 2026 and 2041 are detailed below. Note that these projected figures include for the removal of average speeds cameras once newly dualled carriageways are operational.

Table 9-18: Projected traffic data for 2026 and 2041 north of Dalnaspidal Junction

	2026		2041		Difference between 2026 and 2041 data	
	Hourly flow per lane	Average speed km/hr	Hourly flow per lane	Average speed km/hr	Hourly flow per lane	Average speed km/hr
Northbound	262	97	276	96	+14	-1
Southbound	284	102	291	100	+7	-2

Table 9-19: Projected traffic data for 2026 and 2041 south of Balsporran/ Drumochter Junction

	2026		2041		Difference between 2026 and 2041 data	
	Hourly flow per lane	Average speed km/hr	Hourly flow per lane	Average speed km/hr	Hourly flow per lane	Average speed km/hr
Northbound	262	106	276	104	+14	-2
Southbound	285	100	292	99	+7	-1

Table 9-20: Projected vehicle proportions for 2026 and 2041 at Dalnaspidal

	2026			2041		
	0700 – 1000 hrs	1000 – 1600 hrs	1600 – 1900 hrs	0700 – 1000 hrs	1000 – 1600 hrs	1600 – 1900 hrs
Car	61%	65%	73%	60%	63%	72%
LGV	24%	17%	13%	23%	17%	14%
HGV	15%	17%	13%	17%	20%	14%

Table 9-21: Baseline and projected traffic data comparison, North of Dalnaspidal

	Difference between 2015 and 2026 data		Difference between 2015 and 2041 data	
	Hourly flow per lane	Average speed km/hr	Hourly flow per lane	Average speed km/hr
South of Dalnaspidal				
Northbound	+82	+8	+96	+5
Southbound	+92	+12	+99	+11
North of Dalnaspidal				
Northbound	+82	+10	+96	+9
Southbound	+92	+24	+98	+22

- 9.4.61 **Table 9-21** above shows the comparison between hourly flows and average speeds between the 2015 baseline scenario and projected 2026 and 2041 data with the Proposed Scheme. Note that the baseline average speed includes for the introduction of Average Speed Cameras (ASC) along A9 single carriageway sections. The projected Proposed Scheme data is with ASCs removed.
- 9.4.62 Based on the methodology set out in **section 9.2** the projected figures result in a **Low** stress rating for vehicle travellers. As well as increased average speeds, 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 be an improvement to safety, further reducing fear and frustration which both contribute to driver stress. Therefore, it is anticipated that there will be a **Slight beneficial** impact on driver stress.

9.5 Mitigation

- 9.5.1 This section discusses mitigation requirements in relation to the assessment of Effects on All Travellers for the Proposed Scheme.
- 9.5.2 During construction, several NMU routes will be affected with the potential for significant adverse impacts, as outlined in **section 9.4**. These effects will be temporary and it will be up to the Contractor to provide suitable temporary crossings, diversions or closure to the network of NMU routes as appropriate, in line with the Contractor's phased programme of works.
- 9.5.3 Any adverse impacts relating to views from the road have been considered during the design stage and embedded mitigation has been incorporated into the Proposed Scheme, as detailed in **paragraphs 9.4.3 to 9.4.4**. During construction, the works will be suitably phased to reduce disruption and delays, as far as is practicable, which will also help minimise the temporary impacts on views from the road.
- 9.5.4 Two significant potential impacts have been identified to NMU1 and NMU5, and one area with significant impacts with respect to views from the road around Drumochter Lodge. **Table 9-22** below details the Standard and Specific Mitigation Commitments in relation to All Travellers to reduce these impacts.
- 9.5.5 'Standard Mitigation' is considered applicable across all A9 Dualling schemes, 'Embedded Specific Mitigation' refers to elements, included in the DMRB Stage 3 design for the Proposed Scheme, that must be carried through to the detailed design and construction stage to ensure their delivery, and 'Additional Specific Mitigation' measures are further measures that must be implemented to avoid, reduce or offset identified effects.
- 9.5.6 Specific Mitigation Commitments AT1-21 should be read in conjunction with **Chapter 13** and **14** and the **Environmental Mitigation Drawings (Drawings 6.1-6.7, Volume 3)**. These drawings will form part of the contract documents, including requirements to ensure that an appropriate level of mitigation is carried out to reduce any potential effects.

Monitoring Requirements

- 9.5.7 Reinstated NMU routes, access tracks and underpass crossings will be inspected for construction defects before handover to Transport Scotland, after which their condition will be monitored under routine maintenance inspections schedules during the operational phase of the scheme.

Table 9-22: Standard and specific mitigation commitments for the Effects on All Travellers

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
Standard A9 Mitigation					
SMC-AT1	Throughout Proposed Scheme	Construction	As far as reasonably practicable, the construction programme will take into account the need to minimise the length of closures or restrictions of access for NMUs.	To minimise length of closures or restrictions of access for NMUs.	None required
SMC-AT2	Throughout Proposed Scheme	Construction	Where practicable, temporary diversion routes and/ or assisted crossings will be provided to maintain safe access for NMUs throughout the construction works. Any closure or re-routing of routes used by NMUs will take cognisance of the 'Roads for All: Good Practice Guides for Roads' (Transport Scotland, 2013). These will be agreed in advance with the relevant local authorities and will be clearly indicated with signage as appropriate.	To maintain safe access for NMUs throughout the construction works.	Any closures will be agreed with Transport Scotland (Rights of Way), CNPA and/ or PKC (local and core paths).
SMC-AT3	Throughout Proposed Scheme	Pre-Construction	In consultation with the relevant Roads Authority and public transport provider, bus stops affected by the works will be relocated safely with a safe access route provided for NMUs. Does not apply to Project 7, more specific mitigation required for this Scheme.	To maintain access to Public Transport facilities.	Consultation with the relevant Roads Authority and public transport provider
SMC-AT4	Throughout Proposed Scheme	Construction	The Contractor will produce a traffic management plan that will include measures to avoid or reduce disruption to the road traffic, and in accordance with the Traffic Signs Manual (Department of Transport, 2009). The plan will include consideration of the timing of works, the location of haul roads to reduce site traffic on the public roads and a well maintained traffic management system with sweeping of roads to reduce construction debris on the carriageway.	To avoid or reduce disruption to the road traffic.	None required
SMC-AT5	Throughout Proposed Scheme	Construction	Reasonable precautions will be taken by the Contractor to avoid or reduce road closures. One lane in each direction will be provided for A9 traffic during peak hours (Mon to Fri) except in exceptional circumstances and for closures which are pre-approved by Transport Scotland e.g. those required during blasting.	To avoid or reduce road closures and resulting disruptions to traffic.	Approval required from Transport Scotland in the event of required A9 lane closures.
SMC-AT6	Throughout Proposed Scheme	Construction	Road diversions will be clearly indicated with road markings and signage as appropriate. Any road closures will be notified in advance through road signage and appropriate signage will be provided for the duration of the closure. The Contractor will also be responsible for identifying any notable changes in patterns of road network use during construction, where such changes may cause significant disruption elsewhere (such as drivers re-routing away from the A9), and will review and update traffic management provisions as appropriate in discussion with Transport Scotland.	To reduce disruption to the road users.	None required
SMC-AT7	Throughout Proposed Scheme	Construction	Appropriate lighting will be provided during any necessary night-time working, taking into account the requirements of Mitigation Items SMC-E10 and SMC-LV4 .	To mitigate potential impacts on driver stress such as fear of potential accidents due to inadequate lighting provision.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
SMC-AT8	NMU facilities	Construction	<p>Access for NMUs will be maintained and improved in accordance with the following principles:</p> <ul style="list-style-type: none"> The requirements of the Equality Act 2010 and 'Roads for All: Good Practice Guides for Roads' (Transport Scotland, 2013) shall be incorporated into the Proposed Scheme wherever practicable; e.g. any bridges, ramps or footpaths will not present potential barriers to disabled people such as the gradient or surfacing. NMU access shall be provided in accordance with the objectives set out in the A9 Dualling NMU Access Strategy (Transport Scotland, 2016a). Surfacing of any new paths including alongside roads will be considered on a case by case basis, taking into account factors such as safety, the type of user and should comply with current standards. Safety of paths will be considered in accordance with the outcome of the Road Restraints Risk Assessment Process and may require provision of barriers. New cycleways/ footpaths will use non-frost susceptible materials to reduce risk of degradation. 	To maintain access for NMUs and provide appropriate facilities based on use and improve access for NMUs.	None required
<i>n/a (note)</i>	<i>n/a</i>	<i>n/a</i>	<i>Further to the above, the mitigation items detailed in Table 21.7 (Landscape and Visual), Table 21.9 (Air Quality) and Table 21.10 (Noise and Vibration) will reduce the adverse amenity impacts on NMU and vehicle travellers during construction.</i>	<i>To reduce the adverse amenity impacts on NMU and vehicle travellers during construction.</i>	<i>n/a</i>
Embedded Mitigation					
P07-AT1	Throughout Proposed Scheme Northbound	Design and Construction	Local realignment of NMU1 (NCN7) shall be undertaken where required through the scheme extent.	To maintain access to NMU1 upon operation of the Proposed Scheme.	None required
P07-AT2	ch.500	Design and Construction	NMU and vehicle underpass to be provided at Dalnaspidal Junction.	To maintain access between NMU5 and Dalnaspidal upon operation of the Proposed Scheme.	None required
P07-AT3	ch.3,020	Design and Construction	Allt A'Choirainn watercourse crossing with hardstanding ledge for pedestrians, primarily for estate use.	To provide NMU access upon operation of the Proposed Scheme.	None required
P07-AT4	ch.7,570	Design and Construction	NMU and vehicle underpass to be provided at Balsporran/ Drumochter Junction.	To provide NMU provision and access upon operation of the Proposed Scheme.	None required
P07-AT5	ch. 800 (northbound), ch.3,600 (northbound) and ch.4,000 (southbound)	Design and Construction	Three Type A lay-bys with enlarged segregation strip and potential links to NMU routes to be provided at Dalnaspidal (northbound) and Drumochter pass (northbound and southbound), refer to Chapters 13 and 14, P07-LV3 .	To provide NMU access and safe stopping places, specifically linking NMU1.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P07-AT6	ch. 600-900 Northbound	Design and Construction	NMU link from Dalnaspidal northbound lay-by to the NCN7 to be provided.	To provide access from lay-by to NMU1 and Dalnaspidal.	None required
P07-AT7	ch. 3,100-3,800 Southbound	Design and Construction	NMU link to be provided from the southbound Drumochter Type A lay-by to the Allt A'Chaorainn underpass.	To provide access from lay-by to NMU1 and 6	None required
P07-AT8	ch. 7,300 Southbound	Design and Construction	Access link from Drumochter Lodge to former Beaully Denny Line track to be provided.	To provide estate access.	None required
P07-AT9	Throughout Proposed Scheme	Design and Construction	Sensitive slope design with input from a Landscapes Architect to soften earthworks; refer to mitigation commitment P07-LV1 in Chapters 13 and 14 .	To lessen the visual impact of the scheme and blend earthworks into the surrounding landscape.	None required
P07-AT10	Throughout Proposed Scheme	Design and Construction	SuDS design to integrate with roadside slopes at all locations where SuDS are adjacent to these slopes. SuDS basins to look as natural as possible to blend into surrounding very open landscape. Refer to mitigation commitment P07-LV2 in Chapters 13 and 14 .	To lessen the visual impact and changes in views from the road/ amenity value of NMU routes.	None required
Project Specific Mitigation					
P07-AT11	Throughout Proposed Scheme	Construction	Pick up/ drop off 'NMU shuttle' service to operate during working hours for the duration of any closure of NMU1 (NCN7) as well as 'out of hours' access in the form of a temporary diversion suitable for walkers and cyclists.	To maintain safe access to NMU1 throughout the construction works.	Any closures will be agreed with Transport Scotland (Rights of Way), CNPA and/ or P&KC (local and core paths).
P07-AT12	ch. 500 Southbound	Construction	Alternative access and A9 pedestrian crossing to be provided for maintenance, estate and NMU access to NMU5 when current access is closed/ removed.	To maintain safe access for NMU5 throughout the construction works.	None required
P07-AT13	Throughout Proposed Scheme Northbound	Design and construction	Appropriate native species woodland planting under planted by heath along the northbound carriageway embankment and within the River Truim and Allt Dubhaig floodplains, as shown on the Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Refer to Chapters 13 and 14, P07-LV21 .	To mitigate views from the road and the visual amenity of NMU routes.	None required
P07-AT14	Throughout Proposed Scheme Northbound	Design and construction	Seeding, heath and scrub planting to the west of the A9 between the verge and HML railway, as shown on the Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Refer to Chapters 13 and 14, P07-LV22 .	To mitigate views from the road and the visual amenity of NMU routes.	None required
P07-AT15	Throughout Proposed Scheme Mainly southbound	Design and construction	Where necessary, reinstatement of coniferous woodland belt to the east of the A9 with varied mix of native species including coniferous and broadleaf trees and shrubs. As shown on the Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Refer to Chapters 13 and 14, P07-LV23 .	To mitigate views from the road and the visual amenity of NMU routes.	None required

Item Ref.	Approximate Chainage/ Location	Timing of Measure	Description	Mitigation Purpose/ Objective	Specific Consultation or Approval Required
P07-AT16	Between ch. 6,750 – 7,000 Northbound	Design and construction	Planting at Balsporran car park to include a wide range of native grass seeding, heath, scrub and small tree species of local provenance to improve biodiversity and visual amenity shall be planted around Balsporran access and car park to soften the SuDS and integrate landscape mitigation. Planting as shown on the Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Refer to Chapters 13 and 14 P07-LV17 .	To mitigate views from the road and the visual amenity of NMU1 and 8.	None required
P07-AT17	Approximate ch. 7400 - 7600 Northbound	Design and construction	Replace woodland planting lost opposite Drumochter Lodge, between the A9 carriageway and slip roads and the River Truim with appropriately diverse species of planting as specified on Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Any woodland/ vegetation lost during construction and the maintenance period shall be replaced with native mixed proposed woodland species to increase biodiversity and enhance landscape character. Refer to Chapters 13 and 14 P07-LV20 .	To mitigate views from the road and the visual amenity of NMU1.	None required
P07-AT18	Throughout Proposed Scheme	Design and construction	Seeding and scrub planting shall be used to soften SuDS basin excavations/ earthworks/ slopes and drainage features to integrate these features, planting as shown on the Environmental Mitigation Drawings 6.1 to 6.7 (Volume 3) . Refer to Chapters 13 and 14 P07-LV27 .	To mitigate views from the road and the visual amenity of NMU routes.	None required
P07-AT19	ch. 5,000 -5,800 Northbound	Design and construction	Appropriate, low level shrub planting and seeding shall be planted adjacent to the retaining wall where space allows. Planting as shown on the Environmental Mitigation Drawings 6.1-6.7 (Volume 3) . Refer to Chapters 13 and 14 P07-LV9 .	To mitigate the visual amenity of NMU1 (NCN7).	None required
P07-AT20	ch. 800 (northbound), ch.3,600 (northbound) and ch.4,000 (southbound)	Design and construction	Further work to type A lay-bys to include features such as retaining walls, viewing platforms, steps, ramps, furniture and interpretation boards – this will be subject to design detail and Transport Scotland approval. Refer to project specific mitigation P07-LV4 to LV6 in Chapters 13 and 14 .	To offer increased enjoyment of the surrounding landscape for NMUs with more pleasant rest stops	Transport Scotland
P07-AT21	Throughout Proposed Scheme	Construction	Contractor to operate phased programme of works to limit concurrent or long periods of closures to existing parking areas at Dalnaspidal, Drumochter Pass lay-bys and Balsporran Cottages.	To provide NMU access and safe stopping places.	None required

9.6 Residual Impacts

9.6.1 This section presents the residual impacts of the Proposed Scheme, taking into account the proposed mitigation measures set out in **section 9.5**, and the likely effects at operation years 15-25, in line with Landscape and Visual assessments (see **Chapters 13 and 14**). Impacts are adverse unless otherwise stated.

Non-Motorised Users (NMUs)

Temporary - Construction Phase

9.6.2 Implementation of the mitigation measures set out in **section 9.5** will reduce impacts on NMU routes during construction; however, it is likely that there will still be some temporary adverse effects throughout the construction process as a result of diverted routes, construction traffic and reduced amenity value of routes.

9.6.3 As detailed in **Table 9-22** the contractor will be required to provide a suitable shuttle facility for cyclists and pedestrians using NMU1 (NCN7) during construction operating hours. The contractor must also be required to provide a temporary route 'out of hours' when the shuttle service would not be provided. In this situation, the worst-case scenario is assessed and there would be a loss of high value NMU1 during closure. As details of construction phasing are not available at this time, it is not clear how much of the route would be closed at any one time; however, it is assumed this would be at least 500m, resulting in a substantial adverse impact on journey length. Overall it is considered there would remain a significant impact during construction. However, this impact is temporary and it is anticipated upon completion the residual impact would reduce.

9.6.4 With alternative safe access provision, the impact on access to NMU5 would reduce to Slight adverse during construction. However, considering the tree loss and proximity to Dalnaspidal Junction works, it is anticipated there would still be an overall **Moderate adverse** impact on users of NMU5. This is a significant impact; however, as this is during construction it is temporary and upon completion the residual impact would reduce.

Permanent

9.6.5 **Section 9.4** identifies two significant potential impacts on NMU1 and NMU5. Through mitigation detailed in **Table 9-22** and given that any replacement winter resilience, native woodland or scattered trees will have established by years 15-25, it is anticipated there will be a **Slight adverse** residual impact on NMU1 and a **Slight/ Negligible** impact on NMU5. Therefore, there will be no significant residual impacts on these NMUs arising from the Proposed Scheme.

9.6.6 At years 15-25 scattered tree planting around Balsporran car park and native woodland and scrub on the southbound side opposite Balsporran will have established. Therefore, there would be a change in visual amenity for NMU8 as views toward the A9 and BDL would be screened. However, this is not anticipated to be a significant change to the amenity value of this NMU route.

Vehicle Travellers - Views from the Road

Temporary - Construction Phase

- 9.6.7 There will be significant temporary effects on views from the road during construction. The Standard Mitigation Commitments listed within **Table 9-22** will help to limit the areas impacted by these temporary effects.

Permanent

- 9.6.8 **Section 9.4** identifies one significant potential impact on views from the road around Drumochter Lodge. Taking into consideration the mitigation commitments detailed in **Table 9-22** there are **no significant residual impacts** on views from the road arising from the Proposed Scheme.
- 9.6.9 **Table 9-23** below sets out the summary of residual impacts.

Table 9-23: Summary of residual impacts table – Effects on All Travellers

Receptor	Description	Sensitivity	Significance of Impact – Construction Phase	Significance of Impact – Operation Year 1	Mitigation Ref. (see Table 9-22)	Residual Significance – Construction Phase	Residual Significance – Operation Years 15-25
NMUs							
NMU1	NCN7 and CNPA Core Path	High	Substantial	Moderate/Slight	P07-AT11, P07-AT13, P07-AT14, P07-AT17, P07-AT18, P07-AT19	Substantial/Moderate	Slight
NMU2	Hill walking track	High	Moderate/Slight	Slight beneficial	Not applicable	Moderate/Slight	Slight beneficial
NMU3	Hill walking track and P&KC Asserted Right of Way	High	Moderate/Slight	Slight beneficial	Not applicable	Moderate/Slight	Slight beneficial
NMU4	Hill walking track	High	Moderate/Slight	Slight beneficial	Not applicable	Moderate/Slight	Slight beneficial
NMU5	General Wade's Military Road	Medium	Moderate	Moderate/Slight	P07-AT15	Moderate	Slight/Negligible
NMU6	Hill walking track	High	Moderate	Slight beneficial	Not applicable	Moderate	Slight beneficial
NMU7	Informal track	Low	Moderate	Slight/Negligible	P07-AT14, P07-AT16	Moderate	Negligible
NMU8	Hill walking track	High	Slight	Slight/Negligible	P07-AT16	Slight	Negligible
Vehicle Travellers – views from the road							
Dalnaspidal ch. -250 – 650	View west across Dalnaspidal, partial views of new NMU links and infrastructure for the junction	Medium	Substantial/Moderate	Slight/Negligible	P07-AT13, P07-AT18	Substantial/Moderate	Slight/Negligible
Drumochter Pass ch. 4,900 – 5,800	Views west with the barrier above the retaining wall in the foreground, wider views will not be impacted	Medium	Substantial/Moderate	Moderate/Slight	P07-AT13, P07-AT14, P07-AT18, P07-AT19	Substantial/Moderate	Slight
Balsporran Cottages ch. 5,900 – 7,000	View west encompassing SuDS features adjacent to the road, new NMU1 track and improved parking facilities at Balsporran	Medium	Substantial/Moderate	Slight	P07-AT16, P07-AT18	Substantial/Moderate	Slight

Receptor	Description	Sensitivity	Significance of Impact – Construction Phase	Significance of Impact – Operation Year 1	Mitigation Ref. (see Table 9-22)	Residual Significance – Construction Phase	Residual Significance – Operation Years 15-25
Drumochter Lodge ch. 7,200 – 7,800	Loss of vegetation to the east and west around new infrastructure around the new Balsporran Drumochter Junction	Medium	Substantial/ Moderate	Moderate	P07-AT15, P07-AT17, P07-AT18	Substantial/ Moderate	Slight/ Negligible

9.7 References

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