

Appendix 9.1

NMU Amenity Value

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1 NMU Amenity Value

1.1 Introduction

1.1.1 The assessment of the potential impacts of the Proposed Scheme on pedestrians, cyclists, and equestrians (non-motorised users (NMU)) was undertaken with reference to Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 8 (Highways Agency et. al. 1993).

1.1.2 Under this guidance the key impacts assessed include the following:

- Journey length and accessibility – changes in journey length may be 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

1.1.3 In order to determine ‘the relative pleasantness’ a number of factors have been considered which could affect the amenity value of a route. This appendix contains the data used to inform the permanent (operational phase year 1) significance of impact on NMU amenity in **Chapter 9**.

1.2 Methodology

1.2.1 Although changes in amenity are subjective, for the purpose of this assessment it is considered that where NMUs would experience a change in traffic (increased flows), noise, visual impact and/ or air quality, there would be an impact on amenity, either beneficial or adverse.

1.2.2 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 dual carriageway underpasses.

1.2.3 Therefore, potential changes in amenity were considered where:

- Existing crossing points (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

1.2.4 The table below provides criteria for the significance of impact for changes to amenity value.

Table 1: 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.

1.3 Potential Impacts - Assessment Data

1.3.1 The four categories used to determine an overall change in amenity value are safety, visual, air quality and noise impacts. Therefore, the amenity value assessment in **Chapter 9** was undertaken based on data provided in relation to:

- Predicted traffic flows
- Predicted impacts on views from receptors representative of NMU routes
- Predicted air quality at receptors representative of NMU routes
- Predicted noise levels at receptors representative of NMU routes

1.3.2 This data is set out below.

Safety in respect to NMUs

1.3.3 Changes in safety can be considered where there may be a change in traffic flow affecting NMU users. The relocation of bus stops from the A9 carriageway to the A889 link road means that there will be no requirement to cross the A9 to access public transport, therefore providing a much safer environment for NMUs.

1.3.4 The closer proximity of the stops to Dalwhinnie also increase NMU safety, reducing the distance walking adjacent to a stretch of road where vehicles may be driving at speed, as the existing A889 is a national speed limit route until it enters Dalwhinnie.

Visual in respect to NMUs

1.3.5 **Chapter 14** considers views from receptors with potential to be impacted by the Proposed Scheme. Representative outdoor and built receptors have been considered, some of which correspond to the NMU routes identified in **Chapter 9**.

1.3.6 **Table 2** below shows the visual receptor assessment table, indicating representative viewpoints from the variety of NMU routes. Receptors not relevant to NMU routes have been removed; and the full table of receptors and potential impacts is contained within **Chapter 14**. Please refer to **Drawing 14.4 (Volume 3)** for the receptor locations.

Table 1: Visual receptor assessment table

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
1. Hill track to A'Bhudheanach (Outdoor receptor) Relevant to NMU3	High/ medium	The existing functional coniferous tree belt screens the road from views from the east at a low elevation. It is only as the track climbs up the hill that the A9 becomes visible and even then only partially. Sustainable Drainage System (SuDS) basin 207 will be partly visible from this location. NCN7 will be diverted around this basin, leaving the basin visible between the road and NCN7. The basin fills the majority of this space and could look like an obvious engineered structure. In the longer distance, Dalwhinnie Distillery is visible to the north, therefore the Dalwhinnie Junction and proposed winter resilience tree planting features will form part of the wider view from this location. The winter resilience planting will help to screen sections of the road and junction.	If any of the tree belt/ vegetation is removed this should be replanted and enhanced where possible. Appropriate planting will be introduced in and around SuDS basin 207. Winter resilience areas will be carefully considered as to their planting species and designed to fit into the landscape and not deteriorate views.	Medium	Moderate/ slight not significant as elements of the Proposed Scheme will be noticeable but not dominate the view	The functional tree belt screens views from low elevations. Further along the track any changes will be able to be perceived, despite the distance from the A9. By this time the SuDS basin and proposed planting associated with the SuDS basin should be established and the feature will become part of the local landscape. Winter resilience planting at Dalwhinnie Junction should also be established.	Established planting will replace any of the tree belt lost during construction, including the winter resilience tree planting.	Low	Slight/ negligible

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
2. NCN7 where it meets existing Dalwhinnie Junction (Outdoor receptor) Relevant to NMU1	High	At this location the proposed A9 widens to the east, therefore views will remain relatively unchanged. Proposed signage will be visible. SuDS basins 213 and 214 will be clearly visible in the view. Dalwhinnie Junction will be visible in the mid-distance.	There will be limited screening from scrub/ shrub planting, proposed SuDS basins 213 and 214 will blend into the surrounding landscape with seeding and planting to replicate the existing landscape and riparian planting.	Medium	Moderate	The Proposed Scheme will be visible along with the SuDS basins. The view will be similar to the existing view.	Established scrub/ shrub planting will blend the SuDS features to become part of the landscape here. The A9 and any associated proposed signage will be clearly visible.	Low	Slight/ negligible
3. A889/ NCN7 near the proposed Dalwhinnie Junction location (Outdoor receptor) Relevant to NMU1	High	The proposed Dalwhinnie Junction and tie-in road are highly visible from this view, with the proposed bridge across the River Truim clearly visible. SuDS feature 225 is a large feature and would likely be visible, especially in the short term. The winter resilience planting areas will also be visible in the mid-distance, and are likely to frame the junction and associated infrastructure within this view to the east, as the woodland planting will form the backdrop to the view, therefore emphasising the junction feature in the foreground.	At year 1, planting will offer no screening towards the junction. Scrub/ shrub planting will provide low level screening of the tie-in road and River Truim crossing. Appropriate seeding/ planting of SuDS feature 225 will be introduced. Planting structure around the junction comprising trees, shrubs and low level heath and grassland to suite landscape.	High	Moderate	The A9 will be visible, with views of the River Truim crossing, tie-in road and SuDS feature 225. The winter resilience planting areas will also be visible in the mid-distance, and are likely to frame the junction and associated infrastructure within this view to the east.	Established planting will increase screening of the embankments and structure of the proposed Dalwhinnie Junction. More established scrub planting will provide additional screening of the River Truim crossing. SuDS feature 225 should have become blended into the landscape by this point. Planting to the junction will be established and this will aid the fit of this area into the surrounding context.	Medium	Slight

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
4. A889/ Ben Alder Cottages (Built and outdoor receptor) Relevant to NMU1	High	The proposed Dalwhinnie Junction and associated infrastructure, including the bridge over the River Truim will be partially visible. There is currently limited screening from woodland and scrub planting around the junction. Winter resilience planting will be visible in the mid-distance, likely framing views across the Dalwhinnie Junction.	Proposed planting surrounding the River Truim crossing structure and grass seeding will blend the embankments into the surrounding landscape. Planting structure around the junction comprising trees, shrubs and low level heath and grassland to suit landscape.	High	Substantial / Moderate	Mid-distance views of the A9 are possible, with the River Truim crossing partially screened by mitigation planting. Winter resilience planting will be visible in the mid-distance, likely framing views across the Dalwhinnie Junction, as the winter resilience woodland planting will form a backdrop to the junction. Other pockets of woodland will be planted across the strath to increase woodland connectivity and to reduce the effect of a linear stretch of woodland	Established planting will screen the embankments and structure around the Dalwhinnie Junction. Planting at the junction will be established and the junction planting will aid the fit of this area into the surrounding context.	Medium	Slight
5. Dalwhinnie Garage/ Loch Ericht Hotel (Built receptor) Relevant to NMU1	High	Looking south and east the Proposed Scheme is visible, with views of the River Truim bridge possible. There is currently limited screening from woodland and scrub planting around the junction. Winter resilience planting will be visible in the mid-distance, likely framing views across the Dalwhinnie Junction.	Proposed planting surrounding the River Truim structure and grass seeding will blend the embankments into the surrounding landscape. Planting structure around the junction comprising trees, shrubs and low level heath and grassland to suite landscape.	High/ medium	Substantial / Moderate	Partial views of the A9 and junction will be possible, partially screened by existing and proposed vegetation. Winter resilience planting will be visible in the mid-distance, likely framing views across the Dalwhinnie Junction.	Established planting will screen the embankments and structure around the Dalwhinnie Junction. Planting at the junction will be established and this will aid the fit of this area into the surrounding context.	Medium	Slight

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
10. GWMR lay-by nearest Dalwhinnie (Outdoor receptor) Relevant to NMU1	High	Mid to long-distance views are possible of the Proposed Scheme and embankments. Changes within this view will be noticeable considering the distance from the Proposed Scheme. The majority of vegetation between this viewpoint and the Proposed Scheme is grassland with some small to medium size shrub planting. Here the BDL crosses the landscape in a west-east direction and then proceeds south on the east side of the A9. Therefore, this is the most dominating feature of this view.	Any vegetation removed due to the construction works should be reinstated and proposed planting on embankments should be locally appropriate. In this location, grass seeding and scrub planting would be most appropriate.	Low	Negligible	As for year 1.	Reinstated grass and shrub planting will be established. Therefore, the view will be similar to the existing view, with the BDL still the most dominating visual feature.	Low	Negligible
11. Cuaich (Built receptor) Relevant to NMU10 and 11	High	The proposed embankments to the A9, associated access tracks and underpass structure will be visible. Trees and vegetation will be removed through the construction process, altering the view and making the Proposed Scheme more visible in the short term. Properties here are predominantly orientated in an east – west direction. SuDS basin 254 will see some removal of woodland here, although this will be less visible if at all visible from Cuaich due to it being on the southern edge of the woodland.	Proposed embankments should be as natural as possible and planted with locally appropriate species. Trees that exist either side of the existing A9 will be replaced with tree planting. Removed trees will be replaced and enhanced at Lechden Woods, so as to increase screening towards the Proposed Scheme and enhance biodiversity. Trees associated with winter resilience will be planted to the east of the road.	High	Moderate	The Proposed Scheme will be highly visible; with views of the mainline clearly visible if trees are only replaced on a like for like basis. If additional tree planting takes place less of the mainline will be visible from Cuaich. There will be partial views of the access track to SuDS basin 254 but this should blend as part of the landscape here. There will also be views of the underpass structure, just as there is in the existing view.	Established tree and shrub planting will provide some screening of the A9 mainline. Planting on embankments should also be established. Seeding and scrub planting associated with SuDS basins and watercourses will be established, helping these features blend into the surrounding landscape.	Medium	Slight

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
12. GWMR east of Cuaich (Outdoor receptor) Relevant to NMU1	High	The A9 mainline will be visible from this view; however, in places it is screened by intervening features at Cuaich (properties and trees) and by Lechden Woods. The A9 is in a position in the landscape that means it does not dominate the view as it sits on a low ridge line, with hills rising to the east. Therefore, it is the surrounding landscape and woodland features that dominate the view rather than the A9. The HML railway is visible in this view also. The embankments of the A9 will be visible. SuDS basin 254 should not be visible due to remaining tree cover at Lechden Woods; however, the access track may be visible as it runs along a slightly higher bit of ground, coming from the left in left out access to Cuaich, which will also be visible. Winter resilience planting to the east of the road will be visible.	Vegetation lost at Lechden Woods will be replaced and enhanced, as should any vegetation either side of the mainline. Seeding, shrub and tree planting will blend the A9 embankment into the surrounding landscape. Tree planting will partly screen the road and traffic from this view.	Medium	Moderate	There will be partial views of the mainline, left in left out access and access track to SuDS basin 254. Naturalistic landform and tree planting will be the most effective in screening the mainline from this view. Winter resilience planting to the east of the road will be visible and will frame Cuaich in views from the west.	Established tree planting will provide screening of the mainline. Seeding and scrub planting will blend naturalistic landform into the surrounding landscape.	Low	Slight/negligible

Viewpoint receptor	Sensitivity of receptor	Operation year 1				Operation years 15-25			
		Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect	Elements of Proposed Scheme visible	Description of embedded and additional mitigation measures	Magnitude of visual effect	Overall significance of effect
14. GWMR at grid reference NN 67118 89706 (Outdoor receptor) Relevant to NMU1	High	Existing vegetation adjacent to the road provides some screening. There are partial views of the Proposed Scheme and embankments. The proposed access track adjacent to the Proposed Scheme will be visible.	There will be limited screening from mitigation tree and shrub planting towards the mainline, however this is an open view therefore lots of vegetation and screening is not appropriate and the embedded mitigation elements. Grass seeding across the embankments will help to blend this into the surrounding landscape.	Medium	Moderate/ slight not significant due to partial views being possible from this location and changes not dominating this view	There will be glimpse views of the Proposed Scheme; mitigation will blend the embankments into the surrounding landscape. Scrub planting will provide partial screening of the access track adjacent to the road.	Established shrub and tree planting will partially screen the embankments and access roads.	Low	Slight

Air Quality in respect to NMUs

- 1.3.7 **Chapter 16** considers the potential impacts of the Proposed Scheme on Air Quality. NMU routes are not specifically detailed within that chapter but the following assessment has been undertaken to inform the potential change in air quality relative to the NMU routes identified within **Chapter 9**.
- 1.3.8 The NMU routes within 200m of Project 8 extents are relevant with respect to the 1-hour mean objective for nitrogen dioxide (NO_2) ($200 \mu\text{g m}^{-3}$). Defra's Local Air Quality Management (TG16) guidance states that exceedances of the 1-hour mean objective is not likely if annual mean NO_2 concentrations are below $60 \mu\text{g m}^{-3}$.
- 1.3.9 Maximum monitored NO_2 concentration for background sites is $8.5 \mu\text{g m}^{-3}$ and for roadside sites is $33.9 \mu\text{g m}^{-3}$. These sites represent a range of relevant exposure for the NMU routes and are both well below $60 \mu\text{g m}^{-3}$. Therefore, any change in amenity value is expected to be negligible for all NMU routes in proximity to the Proposed Scheme in terms of air quality.
- 1.3.10 For the construction phase of the scheme, the NMU routes are considered low sensitivity receptors as public exposure to dust emissions that contribute to elevated local particulate matter (PM_{10}) concentrations is expected to be transient.
- 1.3.11 Overall the construction phase, in terms of air quality, is assessed as presenting a medium level of risk of impacts, following IAQM (2014) 'Guidance on the assessment of dust from demolition and construction'. However, under appropriate construction stage best practice dust control measures as mitigation, the risk of impacts will be insignificant, and are not likely to affect the amenity value of the NMU routes.

Noise in respect to NMUs

- 1.3.12 **Chapter 17** considers the potential noise and vibration impacts of the Proposed Scheme. This assessment has considered sensitive receptors including residential and outdoor receptors.
- 1.3.13 **Table 3** on the page below shows the potential magnitude of change for NMU receptors. Please refer to **Drawings 17.1** and **17.2** within **Volume 3** for noise receptor locations. Further detailed information can be found in **Appendix 17.1** and **17.4** contained within **Volume 2**.

Table 2: Road traffic noise levels for NMU receptors ($L_{A10,18h}$ dB Free-Field)

NMU ref.	X	Y	Do-minimum 2026	Do-something 2026	Short term change	Short term magnitude of change	Do-minimum 2041	Do-something 2041	Long term change	Long term magnitude of change
NMU1_1	263739.5	783828.0	63.5	52.8	-10.7	Major Benefit	63.8	53.1	-10.4	Major Benefit
NMU2	263887.2	781887.9	66.7	64.7	-2.0	Minor Benefit	63.7	65.1	-1.6	Negligible Adverse
NMU3	264033.2	782214.8	59.4	60.1	0.7	Negligible Adverse	56.3	60.4	1.0	Negligible Adverse
NMU1_2	263626.9	784379.5	58.1	56.4	-1.7	Minor Benefit	58.4	57.5	-0.6	Negligible Benefit
NMU8	264353.8	785109.7	62.4	61.5	-0.9	Negligible Benefit	59.5	61.7	-0.7	Negligible Benefit
NMU10	265766.0	786469.9	46.1	46.1	0.0	No Change	43.9	46.4	0.3	Negligible Adverse
NMU11	265723.7	787014.4	58.0	57.2	-0.8	Negligible Benefit	56.7	57.5	-0.5	Negligible Benefit
NMU1_3	266179.0	788638.6	47.6	48.2	0.6	Negligible Adverse	45.7	48.5	0.9	Negligible Adverse
NMU1_4	267488.6	790905.8	54.6	53.6	-1.0	Minor Benefit	51.9	53.9	-0.7	Negligible Benefit
NMU12_1	267690.4	791371.4	54.8	54.8	0.0	No Change	53.4	55.2	0.4	Negligible Adverse
NMU12_2	267736.0	790800.4	57.2	55.2	-2.0	Minor Benefit	54.2	55.6	-1.6	Negligible Benefit
NMU12_3	267632.6	790475.3	50.5	49.0	-1.5	Minor Benefit	47.6	49.3	-1.2	Negligible Benefit
NMU12_4	267616.2	791022.4	51.9	50.1	-1.8	Minor Benefit	48.8	50.5	-1.4	Negligible Benefit