21 Summary of Significant Residual Impacts

21.1 Introduction

21.1.1 This chapter summarises the residual impacts (Tables 21.1 to 21.8) which result as a consequence of the operation of the proposed Scheme, after implementation of the mitigation as set out in Chapter 20 (Schedule of Environmental Commitments), considered to be significant in the context of The Environmental Impact Assessment (Scotland) Regulations (2011). Within this Environmental Statement, impacts are generally defined as significant when they are assessed to be moderate or greater in significance and are considered adverse, unless otherwise stated. Non-significant residual impacts are given within the foregoing chapters of this Environmental Statement, and not summarised within this chapter.

21.1.2 The assessment of the environmental parameters, with respect to the following topics, has found that there are no significant adverse effects as a consequence of the operation of the proposed Scheme:

- Air Quality (Chapter 7);
- Habitats and Biodiversity (Chapter 11);
- Geology, Soils, Contaminated Land and Groundwater (Chapter 12);
- Road Drainage and the Water Environment (Chapter 13); and
- Policies and Plans (Chapter 18).

Table 21.1: Summary of Significant Residual Impacts – Noise and Vibration

Residual Impact	Residual Impact Significance
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme, there are 1,601 dwellings and eight other noise sensitive receptors predicted to have a Slight/Moderate adverse significance at the ground floor. Out of 8,187 receptors modelled, fifteen years after opening with the proposed Scheme, there are 732 dwellings and five other noise sensitive receptors predicted to have a Slight/Moderate adverse significance at the ground floor.	Slight / Moderate Adverse
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme, there are 441 dwellings and two other noise sensitive receptors predicted to have a Moderate/Large adverse significance of noise impact at the ground floor . Out of 8,187 receptors modelled,fifteen years after opening with the proposed Scheme, there are 401 dwellings and five other noise sensitive receptors predicted to have a Moderate/Large adverse significance of noise impact at the ground floor.	Moderate / Large Adverse
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme there are 480 dwellings and five other noise sensitive receptors predicted to have a Large/Very Large adverse significance of noise impact at the ground floor. Out of 8,187 receptors modelled, fifteen years after opening with the proposed Scheme there are 190 dwellings predicted to have a Large/Very Large adverse significance of noise impact at the ground floor.	Large / Very Large Adverse
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme there are 2,127 dwellings and 16 other noise sensitive receptors predicted to have a Slight/Moderate beneficial significance at the ground floor. Out of 8,187 receptors modelled, fifteen years after opening with the proposed Scheme there are 86 dwellings predicted to have a Slight/Moderate beneficial significance at the ground floor .	Slight / Moderate Beneficial
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme, there are 673 dwellings and 10 other noise sensitive receptors predicted to have a Moderate/Large beneficial significance of noise impact at the ground floor. Out of 8,187 receptors modelled, fifteen years after opening with the proposed Scheme, there are five dwellings predicted to have a Moderate/Large beneficial significance of noise impact at the ground floor.	Moderate / Large Beneficial
Out of 8,187 receptors modelled, at the year of opening with the proposed Scheme, there are 26 dwellings predicted to have a Large/Very Large beneficial significance of noise impact at the ground floor.	Large / Very Large Beneficial

Table 21.2: Summary of Significant Residual Impacts – Landscape

Residual Impact	Residual Impact Significance	
	Winter Year of Opening	Summer (+ 15 years)
Local Landscape Character Areas with significant direct residual effects		
Culloden Estate Farmlands LLCA (ch1150 to ch3950): • Reinstatement and provision of screening of the existing A96 . Screening, integration and softening of elevated road corridor, following the development of the mitigation planting and seeding. • Long distance views to the Moray Firth retained where possible. • Direct adverse effect on farmland and settlements - large scale, long term, permanent. • Direct adverse effect from introduction of Smithton Junction including associated structures, earthworks, lighting, CCTV masts, signage - large scale, long term, permanent. • Direct adverse local effect due to the introduction of noise barriers and bunds – small scale to medium scale, long term, decreasing over time. • Direct adverse local effect due to the introduction of the SUDS - medium scale, long term, decreasing over time.	Moderate / Substantial	Moderate
Open Coastal Lowland LLCA (ch3950 to ch6300 and ch10500 to ch17800): • Addition of hedgerows, and hedgerow with trees as boundary elements to the road corridor to strengthen landscape pattern, sense of place and character. • Screening, integration and softening of elevated road corridor from development of mitigation planting and seeding. • Long distance views to the Moray Firth retained where possible. Partial screening of the proposed Scheme by development of mitigation planting. • Direct adverse effect on farmland - large scale, long term, permanent.	Moderate	No longer significant

Residual Impact	Residual Impact Significance	
	Winter Year of Opening	Summer (+ 15 years)
• Direct adverse effect from introduction of Balloch Junction, Brackley Junction and Mid Coul Junction associated structures, earthworks, lighting, CCTV masts, and signage - large scale, long term, permanent. • Direct adverse local effect due to the introduction of the SUDS - medium scale, long term, decreasing over time. • Direct adverse effect at Gollanfield due to realignment of C1013 Gollanfield Road and introduction of overbridge (PS21: Gollanfield Road Overbridge) - large scale, long term, permanent. • Direct adverse effect at Cockhill due to realignment of access road - large scale, long term, permanent. • Direct adverse local effect due to the introduction of noise barriers at Easter Glackton - medium scale, long term, decreasing over time. • Indirect adverse effect from Nairn West Junction including associated structures, earthworks, CCTV masts, lighting and signage - large scale, long term, permanent.		
Forest Edge Farmland LLCA (ch6300 to ch8900): • Screening, integration and softening of elevated road corridor from development of mitigation planting and seeding. • Open long distance views to the west and north west retained in key locations where possible. • Direct adverse effect on farmland and topography - large scale, long term, permanent. • Direct adverse effect from introduction of underbridge (PS03: A96 Kerrowaird Underbridge) with associated embankments - large scale, long term, permanent. • Direct adverse local effect due to the introduction of the SUDS - medium scale, long term, decreasing over time.	Moderate	No longer significant
Tornagrain Woods LLCA (ch8900 to ch10500): • Screening integration and softening of road corridor from development of mitigation planting and seeding. • Direct adverse effect on woodland - large scale, long term, permanent. • Direct adverse effect from introduction of Mid Coul Junction including associated structures, earthworks, flood mitigation bund, CCTV masts, lighting and signage - large scale, long term, permanent. • Direct adverse effect from introduction of overbridge (PS04: C1020 Dalcross Station Road Overbridge) - large scale, long term, permanent. • Direct adverse local effect due to the introduction of the SUDS - medium scale, long term, decreasing over time.	Moderate	No longer significant
Enclosed Forest Edge Farmland LLCA (ch17800 to ch22300): • Screening integration and softening of road corridor from development of mitigation planting and seeding. • Direct adverse effect from introduction of a large scale road corridor to a relatively undeveloped landscape. • Direct adverse effect on farmland - large scale, long term, permanent. • Direct adverse effect from introduction of Nairn West Junction associated structures, earthworks, CCTV masts, lighting and signage - large scale - large scale, long term, permanent. • Direct adverse effect at Moss-Side due to realignment of C1163 Delnies – Kildrummie – Howford Road, introduction of the rail underbridge (PS12A Moss-Side Rail Underbridge) and introduction of NMU underpass (PS25: Moss-side NMU Underpass) - large scale, long term, permanent. • Direct adverse effect as a result of introduction of a new structure at Moss-Side (PS12 Moss-Side Rail Underbridge) - large scale, long term, permanent. • Direct adverse effect due to realignment of B9091 Croy - Clephanton - Kildrummie - Nairn Road and B9090 Loch Flemington – Clephanton – Cawdor – Nairn Road and introduction of the B9090 and B9091 Link Road – medium scale, long term, permanent. • Direct adverse effect due to introduction of overbridge (PS13: B9090 Overbridge) - large scale, long term, permanent. • Direct adverse local effect due to the introduction of the SUDS - medium scale, long term, decreasing over time.	Moderate / Substantial)	Moderate

Residual Impact	Residual Impact Significance	
	Winter Year of Opening	Summer (+ 15 years)
River Nairn Corridor LLCA (ch22300 to ch22500): • Softening of appearance and partial integration of underbridge (PS14: River Nairn Underbridge) into the landscape, through the development of adjacent riverside planting. • Direct adverse effect on Ancient Woodland - large scale, medium term, decreasing over time. • Direct adverse effect from introduction of River Nairn crossing with associated embankments - large scale, long term, permanent.	Moderate / Substantial	Moderate / Substantial
Auldearn Forested Rolling Farmland LLCA (ch22500 to ch27400): • Screening integration and softening of road corridor from development of mitigation planting and seeding. • Direct adverse effect on farmland and woodland - large scale, long term, permanent. • Direct adverse effect from introduction of NMU path on embankment at River Nairn underbridge - medium scale, long term, permanent. • Direct adverse effect from introduction of Nairn East Junction including associated structures, earthworks, CCTV masts, lighting and signage - large scale, long term, permanent. • Direct adverse effect at C1175 Househill – Raitloan – Howford Road due to introduction of underbridge (PS15: C1175 Underbridge) – medium scale, long term, permanent. • Direct adverse effect from realignment of A939 Tomintoul - Grantown on Spey - Nairn Road and introduction of overbridge (PS16: A939 Overbridge) and embankments. • Direct adverse local effect due to the introduction noise bund at Knocknagillan – small scale, long term, decreasing over time.	Moderate / Substantial	Moderate
Auldearn Open Farmland LLCA (ch27400 to ch29650): • Screening integration and softening of road corridor from development of mitigation planting and seeding. • Direct adverse effect on farmland - large scale, long term, permanent. • Direct adverse effect at C1172 Auldearn– Station - Drum Road due to introduction of underbridge (PS18: C1172 Underbridge) - medium scale, long term, permanent. • Direct adverse effect due to realignment of access road at Courage and introduction of overbridge (PS19: Hardmuir Overbridge No 1) - large scale, long term, permanent. • Direct adverse effect due to the introduction of the SUDS - medium scale, long term, decreasing over time.	Moderate	No longer significant
Local Landscape Character Areas with significant indirect residual effects		
Flemington Eskers LLCA: • Visibility to the proposed Scheme from elevated locations within the LLCA and noise from traffic would affect qualities of remoteness and tranquillity. • Visibility of lighting at proposed Brackley and Nairn West Junctions. • Development of the mitigation planting would further limit the distant visibility to the proposed Scheme.	Moderate	No longer significant

Table 21.3: Summary of Significant Residual Impacts – Visual

Residual Impact	Residual Impact Significance
Built receptors and Outdoor receptors with changes to views	
In the winter year of the proposed Scheme opening, 365 (54.1 %) individual built receptors (individual properties) and 30 (44.8%) outdoor receptors would be affected by significant adverse effects.	Moderate or greater
By the summer, 15 years after the proposed Scheme opening, mitigation would reduce the total number of properties affected by significant adverse effects to 150 (22.2%), and for the outdoor receptors, the total would have reduced to 19 (28.4%).	Moderate or greater

Table 21.4: Summary of Significant Residual Impacts – Cultural Heritage

Residual Impact	Residual Impact Significance
Asset 85: Isle View Ring Cairn. The proposed Scheme would remain visible and diminish the rural character of the asset	Moderate
Asset HLT25: Auldearn Battlefield. Partial removal of historic landscape elements and changes in use of the asset. Impact on view of the asset from the National Trust for Scotland Viewpoint at Boath Doocot, which is a primary battlefield viewing location.	Moderate

Table 21.5: Summary of Significant Residual Impacts – Community and Private Assets

Residual Impact	Residual Impact Significance
Residential Land and Property	
Seafield. Direct access to existing A96 stopped up, resulting in additional vehicular journey distance for residents when travelling west towards Inverness (approximately 1.6km).	Moderate
Ashton Farm Cottages. Direct access to existing A96 stopped up, resulting in additional vehicular journey distance for residents when travelling west (approximately 1.1km).	Moderate
Milton of Culloden Smallholdings. Direct access to existing A96 stopped up, resulting in additional vehicular journey distance for residents when travelling west (approximately 1.0km) or east (approximately 3.2km).	Moderate
6 Milton of Culloden. The entire plot subject to acquisition. Partial loss of field, demolition of field shelter and loss of garden to proposed dual carriageway (0.89ha). Access – as above for Milton of Culloden Smallholdings.	Moderate / Substantial
Milton of Gollanfield. Direct access to existing A96 stopped up, resulting in additional vehicular journey distance for residents when travelling west (approximately 2.4km).	Moderate
Lochside, Brackadale and Easter Glackton. Direct access to existing A96 stopped up, resulting in additional vehicular journey distance for residents when travelling east (approximately 2.9km).	Moderate
Balnaspirach. Provision of new access route to/from properties resulting in reduced vehicular journey distance for residents accessing the existing A96 (1.2km).	Moderate (Beneficial)
East Lodge Cottage and Mill of Boath. Stopping-up one end of Waterloo – Eastertown – Inshoch Road (U2997), resulting in additional vehicular journey distance for residents when travelling west (approximately 1.1km).	Moderate
Innesfree. Partial loss of field (0.48ha).	Moderate
Commercial and Industrial	
Polfalden Kennels and Cattery. Direct access to existing A96 stopped up, resulting in additional journey distance for customers and employees when travelling west (approximately 2.2km) or east (approximately 1.2km).	Moderate
Grigorhill Industrial Estate. Stopping-up one end of Blackpark – Grigorhill – Newmill Road (U3010), resulting in additional journey distance for customers and employees using the A939 Tomintoul – Grantown on Spey – Nairn Road to access the industrial estate (approximately 1.2km).	Moderate
Community Impacts and Wider Socio-economic impacts	
Seafield. Severance of core path IN08.10 would result in pedestrians and cyclists using the PS01 Smithton Junction Underbridge to access L2/ Barn Church Road (C1032) to access community facilities in Smithton.	Moderate (Pedestrians / Cyclists)
Allanfearn. Severance of core paths IN08.15 and IN08.16 would result in a diversion of approximately 0.8km (Culloden) and 2km (Balloch) for pedestrians to access community facilities in Culloden and Balloch.	Substantial (Pedestrian)

Residual Impact	Residual Impact Significance
Grigorhill. Newton of Park and Craggie: Stopping up of Blackpark – Grigorhill – Newmill Road (U3010) would result in a diversion via either the PS16 A939 Overbridge or the PS22 B9111 Underbridge of approximately 1.1km and 2km respectively for residents accessing community facilities in Nairn.	Moderate (Cyclists)
Waterloo and Millhill. Severance of public right of way R1 would result in a diversion via PS28 Auldearn NMU Underpass of approximately 1.0km for pedestrians to access community facilities in Auldearn.	Substantial (Pedestrians)
Increased employment during construction.	Beneficial
The reduction in traffic volumes on the existing A96 through Nairn is expected to relieve existing severance for residents accessing the facilities and services within Nairn.	Moderate Beneficial
Development Land and Planning Applications	
LA07: Mixed Use (Milton of Culloden) (IN85). 3.74ha of direct land-take. This would reduce the overall development capacity of the site and as such an Adverse impact is expected.	Adverse
PA04: Land at Stratton and East Seafield. 21.89ha of direct land-take. Planning in Principle for Stratton (Ref 09/00141/OUTIN) requires consultation with Transport Scotland to ensure the safeguarding of the land for the proposed Scheme.	Mixed Adverse / Beneficial
PA18: Inverness Airport. 26.46ha of direct land-take. Planning in Principle (Ref 08/00215/OUTIN) requires consultation with Transport Scotland to ensure the safeguarding of the land for the proposed Scheme.	Mixed Adverse / Beneficial
PA19: Tornagrain. IMFLDP sets out that transport improvements to the A96 Aberdeen – Inverness Trunk Road are necessary to deliver the first phase of the development.	Beneficial
PA20: Highland Food Stop. • No direct land-take therefore land would still be available for its proposed use as a hotel. • Proximity of the proposed Scheme to the proposed development would impact on the amenity (visual and noise) of the site and its development capacity (Adverse). • Proposed Brackley Junction would facilitate connections to settlements, Inverness Airport, the existing A96 and the proposed Scheme (including NMUs) and safety would be improved (Beneficial)	Mixed Adverse / Beneficial
Agricultural, sporting and Forestry Interests	
Seafield of Raigmore Farm (Land Plot P0436). • Loss of 3.56ha in total of which 1.22ha is LCA Class 2, 1.00ha is LCA Class 3.1, 1.29ha is scrub and 0.05ha of other land. • One field affected, one field lost and one scrub area subject to land-take. • Land lost equates to 59% of total land plot area. The land plot area is not thought to be representative of the total area farmed. • Loss of boundary features and disruption to field drainage system.	Moderate
2 Milton of Culloden (Land Plot P0416). • Loss of 6.56ha in total of which 5.19ha is LCA Class 3.1, 0.56ha is LCA Class 3.2, 0.77ha is amenity woodland and 0.04ha is other land. • Two land parcels affected and one parcel lost. Land lost equates to 47% of total farmed area. Loss of boundary features, access and disruption to field drainage system	Substantial
Land at Balloch Farm (Land Plot P0410). • Loss of 5.05ha in total of which 3.30ha is LCA Class 2, 1.57ha is LCA Class 3.1 and 0.17ha of other land. • Three fields affected. • Additional area of 0.03ha of other land subject to servitude rights. • Land lost equates to 6% of total farmed area. • Loss of boundary features, access and disruption to field drainage system.	Moderate
Upper Cullernie Farm (Land Plot P0406). • Loss of 16.34ha in total of which 5.99ha is LCA Class 2, 6.13ha is LCA Class 3.1, 4.09ha is LCA Class 3.2 and 0.13ha of other land. • Six fields affected. • Land lost equates to 5% of total farmed area. • Loss of boundary features, access and disruption to field drainage system.	Moderate

Residual Impact	Residual Impact Significance
Mid Coul Farms (Land Plot P0304, P0557, P0558). • Loss of 59.38ha in total of which 18.14ha is LCA Class 2, 14.30ha is LCA Class 3.1, 20.25ha is LCA Class 3.2, 1.47ha is LCA Class 4.1, 2.45ha is rough grassland and 2.78ha is other land. • Land lost equates to 5% of the total farmed area. • Twenty fields and one parcel of scrubland affected, with severance of six fields. • Loss of access, boundary features and disruption to field drainage system.	Moderate / Substantial
Milton of Braichlaich Farm (Land Plot P0449). • Loss of 13.42ha in total of which 0.08ha is LCA Class 2, 4.45ha is LCA Class 3.1, 8.21ha LCA Class 3.2 and 0.67ha of other land. • Eleven fields affected. • Land lost equates to 9% of total farmed area. Creation of severed area of approximately 0.12ha.	Moderate
Balspardon Farm (Land Plot P0448). • Loss of 14.09ha in total of which 3.08ha is LCA Class 3.1, and 10.84ha is LCA Class 3.2 and 0.16ha is other land. • Seven fields affected, with severance of two fields. • Land lost equates to 10% of total farmed area.	Moderate / Substantial
Land at Lochside (Land Plot P0330). • Loss of 3.85ha in total of which 3.72ha LCA Class 3.2, 0.09ha is woodland and 0.04ha is other land. • Two fields and one parcel of woodland affected. • Land lost equates to 23% of total farmed area. • Loss of access, boundary features and disruption to field drainage system.	Substantial
Easter Glackton Farm (Land Plot P0293). • Loss of 8.22ha in total of which 3.04ha is LCA Class 3.2, 1.51ha is LCA Class 4.2, 3.59ha is LCA Class 5.3 and 0.08ha is other land. • Three fields affected and one field lost. • Land lost equates to 12% of total farmed area. • Loss of boundary features and disruption to field drainage system.	Moderate / Substantial
Blackcastle Farm (Land Plot P0444). • Loss of 6.85ha in total of which 2.95ha LCA Class 3.2, 2.29ha is LCA Class 4.1, 1.20ha is LCA Class 4.2 and 0.41ha is other land. • Four fields affected with severance of one field. • Land lost equates to 12% of total farmed area. • Loss of boundary features and disruption to field drainage system.	Moderate / Substantial
Delnies and Ardersier (Land Plot P0213). • Loss of 4.02ha in total of which 1.47ha is LCA Class 3.2, less than 0.01ha is LCA Class 4.1, 0.80ha is LCA Class 4.2, 1.19ha is woodland and 0.55ha is other land. • One field, two parcels of woodland and one area of roadside grassland affected. • Land lost equates to 8% of total land plot area. • Loss of boundary features and disruption to field drainage system. • Low to high windthrow risk.	Moderate
Little Kildrummie Farm, Easter Lochend and Meikle Kildrummie (Land Plot P0221 and P0278). • Loss of 18.00ha in total of which 1.71ha is LCA Class 2, 6.97ha is LCA Class 3.1, 8.49ha is LCA Class 3.2, 0.44ha is LCA Class 4.1 and 0.39ha is other land. • Six fields affected, with severance of four fields. • Additional area of 0.12ha of other land subject to servitude rights. • Land lost equates to 6% of total farmed area. • Loss of boundary features, access and disruption to field drainage system.	Moderate
Broadley Farm and Lochdhu Farm (Land Plot P0217 and P0219). • Loss of 24.77ha in total of which 0.28ha is LCA Class 2, 12.30ha is LCA Class 3.1, 8.71ha is LCA Class 3.2, 2.23ha is woodland and 1.25ha of other land. • Loss of one field and two parcels of woodland. • Ten fields and seven parcels of woodland affected, with severance of five fields. • Land lost equates to 8% of total land plot area. • Loss of boundary features and disruption to field drainage system. • Low to high windthrow risk.	Moderate

Residual Impact	Residual Impact Significance
Blackpark Farm (Land Plot P0043 and P0039)). • Loss of 7.61ha in total of which 7.60ha is LCA Class 3.2, less than 0.01ha is woodland and 0.01ha is other land. • Five fields and one parcel of woodland affected, with four fields subject to severance. • Additional area of 0.01ha of woodland subject to servitude rights. • Land lost equates to 7% of total farmed area. • Loss of boundary features and disruption to field drainage system. • Blackpark – Grigorhill – Newmill Road (U3010) stopped up requiring diversion via PS16 (A939 Overbridge) at ch23850 to access severed fields to the south of the dual carriageway alignment.	Moderate
Skene Park Farm and Kinnudie Farm (P0069, P0143 and P0609). • Loss of 9.05ha in total of which 1.60ha LCA Class 3.1, 6.02ha is LCA Class 3.2, 0.16ha is LCA Class 4.1, 0.83ha is rough grassland and trees, and 0.44ha is other land. • Four fields and one parcel of rough grassland and trees affected of which two are severed. • Land lost equates to 4% of total farmed area. • Loss of boundary features and disruption to field drainage system.	Moderate
Auchnacloich Farm (Land Plot P0159). • Loss of 13.23ha in total of which 2.38ha is LCA Class 3.1, 10.35ha is LCA Class 3.2, 0.04ha is LCA Class 4.1, 0.42ha is LCA Class 4.2 and 0.04ha is other land. • Five fields affected, of which two are severed. • Land lost equates to 13% of total farmed area. • Loss of boundary features and disruption to field drainage system.	Moderate / Substantial
Penick Farm (Land Plot P0029 and P0030). • Loss of 15.33ha in total of which 4.64ha LCA Class 2, 5.86ha LCA Class 3.1, 4.77ha LCA Class 3.2, less than 0.01ha of 4.2 and 0.06ha of other land. • Seven fields affected of which one is severed. • Land lost equates to 8% of total farmed area. • Loss of boundary features and disruption to field drainage system.	Moderate
Feddan Farm and Bogside of Boath (Land Plot P0001 and P0113). • Loss of 14.63ha in total of which 1.63ha is LCA Class 2, 8.69ha is LCA Class 3.1, 3.94ha is LCA Class 3.2, 0.17ha is LCA Class 4.2 and 0.20ha is other land. • 12 fields affected, of which four are severed. • Land lost equates to 10% of farmed area at Feddan and Bogside of Boath. Loss of boundary features and disruption to field drainage system.	Moderate / Substantial
Stratton Lodge Wood (Land Plot P0433). • Parcel area 3.91ha. Loss of 1.02ha (26% of woodland area) from one land parcel. Loss of 0.12ha of other land. • Additional area of 0.03ha of other land would be subject to servitude rights. • Loss of boundary features and disruption to drainage/woodland drainage system. Woodland includes mixed broadleaves and mixed exotic confiers. • Mixed broadleaves have an average Root Protection Area (RPA) of 132.9m^2 per tree - woodland loss would result in a moderate to high windthrow risk.	Moderate / Substantial
Tornagrain Wood (Land Plot P0383). • Parcel area 23.65ha. Loss of 6.19ha (26% of woodland area) from one land parcel. • Woodland severed into two areas. • Loss of boundary features and disruption to drainage system. • Woodland comprises Scot's pine, Norway spruce, Sitka spruce and Douglas fir. • Scot's pine has an average RPA of 87.6m2 per tree - woodland loss would result in a moderate to high windthrow risk. • Scot's pine has an average RPA of 181.9m2 per tree - woodland loss would result in a moderate windthrow risk. • Douglas fir has an average RPA of 14.5m^2 per tree - woodland loss would result in a moderate to high windthrow risk.	Moderate / Substantial

Residual Impact	Residual Impact Significance
Moray Estate (Land Plot P0342). • Parcel area 3.79ha. Loss of 1.03ha of woodland (27% of woodland area) and 0.45ha of other land. • Woodland severed into two areas. • Additional area of 0.17ha of other land would be subject to servitude rights. • Loss of boundary features and disruption to drainage system. • Woodland comprises varied age classes of mixed broadleaves with an average RPA of 28.3m^2 per tree - woodland loss would result in a moderate windthrow risk.	Moderate / Substantial
Castle Stuart Woodlands (Land Plot P0340). • Loss of 5.15ha of which 5.09ha is woodland and 0.06ha is other land. • Additional area of 0.07ha of woodland would be subject to servitude rights. • Four parcels affected. Land lost equates to 9%of total area. Loss of boundary features and disruption to drainage system. • Low to High windthrow risk.	Moderate / Substantial
Delnies Wood (Land Plot P0215). • Loss of 1.03ha of which 0.55ha is woodland and 0.48ha is other land. • Two parcels affected. • Land lost equates to 2% of total area. • Loss of boundary features and disruption to drainage system.	Moderate
Crook Wood (Land Plot P0190). • Parcel area 39.22ha. Loss of 2.63ha (7% of woodland). • Additional area of 0.03ha of woodland would be subject to servitude rights. • Loss of boundary features and disruption to drainage system. • Woodland comprises Scot's pine and small amounts of Norway spruce, beech and larch. • The RPA for the Scot's pine is on average 47.8m^2 per tree - woodland loss is likely to result in a moderate to high windthrow risk.	Moderate / Substantial
Househill Woodlands (Land Plot P0189). • Loss of 3.82ha of which 3.79ha is woodland and 0.03ha is other land. • Additional area of 0.09ha would be subject to servitude rights (0.08ha woodland and 0.01ha of other land). • Two parcels affected. • Land lost equates to 27% of total area. • Loss of boundary features and disruption to drainage system.	Moderate / Substantial
Kinsteary Estate Woodlands (Land Plot P0141). • Loss of 3.49ha of which 3.46ha is woodland and 0.03ha is other land. • Additional area of 0.01ha of woodland would be subject to servitude rights. • Two parcels affected. • Land lost equates to 8% of total forested area. Loss of boundary features and disruption to drainage system. • Although not directly affected by land-take, the removal of trees from within 141/1W would result in a high windthrow risk in the indirectly affected block adjacent to and south of 141/1W.	Moderate / Substantial
Russells Wood (Land Plot P0163). • Parcel area 25.66ha. Loss of 5.31ha of which 5.25ha is woodland and 0.06ha of other land. • Additional area of 0.03ha of woodland would be subject to servitude rights. • Woodland severed into two areas. • Land lost equates to 21% of total forested area. • Loss of boundary features and disruption to drainage. • Woodland comprises Scot's pine, Sitka spruce, larch, mixed broadleaves and Douglas fir. • RPA of affected parcels ranges from 17.7m^2 to 58.0m^2. Of the directly impacted areas of woodland, wind throw risk is expected to be moderate to high.	Moderate / Substantial

Residual Impact	Residual Impact Significance
Wester Hardmuir Wood. West (Land Plot P0017). • Parcel area 24.38ha. Loss of 1.58ha (6% of woodland) and loss of 0.04ha of other land. • Loss of boundary features and disruption to drainage. • Woodland includes Scot's pine, Norway spruce, larch and sitka spruce. • Scot's pine RPA is on average 66.4m2 per tree - woodland loss would result in a high windthrow risk. • Norway spruce and sitka spruce RPA is on average 91.2m2 per tree - woodland loss would result in a high windthrow risk. • Larch RPA is on average 54.5m2 per tree -woodland loss would result in a high windthrow risk.	Moderate / Substantial
Wester Hardmuir Wood, East (Land Plot P0016). • Parcel area 20.18ha. Loss of 3.67ha of woodland (18% of parcel area) and 0.05ha is other land. • Additional area of 0.03ha of woodland would be subject to servitude rights. • Loss of boundary features and disruption to drainage. • Woodland includes Scot's pine, Douglas fir, larch, sycamore and beech. • Mixed conifer RPA is on average 9.3m2 per tree woodland loss would result in low windthrow risk. However, Scot's pine were assessed to have a low to moderate windthrow risk. • Young broadleaves RPA is on average 9.3m2 per tree - woodland loss would result in a low windthrow risk. • Mature broadleaves RPA is on average 228.1m2 per tree. Windthrow was not assessed as the proposed Scheme does not encroach on this compartment of woodland.	Substantial
Land at Hardmuir (Land plot P0011). • Parcel area 3.85ha. Loss of 2.00ha (52% of woodland) from one land parcel. • Loss of boundary features and disruption to drainage. • Woodland includes Sliver birch and Scot's pine. • Silver birch RPA is on average 13.4m2 per tree - woodland loss would result in a low to moderate windthrow risk. • Scot's pine RPA is on average 15.75m2 per tree - woodland loss would result in a moderate windthrow risk.	Moderate / Substantial

Table 21.6: Summary of Significant Residual Impacts – Effects on all Travellers

Residual Impact	Residual Impact Significance
During the operation of the proposed Scheme, approximately 30km of shared use path would be constructed. The path would tie in with existing paths to create a connection between Inverness to Nairn, as well as a separate section through Auldearn resulting in an overall substantial beneficial effect.	Substantial Beneficial
Moderate adverse effects have been deemed for 15 of the 80 identified NMU routes. The impact is largely due to the introduction of road infrastructure into a previously rural environment and/or with the journey length also increasing on a small number of these routes. The routes are: IN08.10, IN08.32, NA04.02, NA04.03, NA04.04, A4, A10, L7, L8, Milton of Breachlich Road (U1025), B9091 Croy – Clephanton – Kildrummie – Nairn Road , Waterloo – Eastertown – Inshoch Road (U2997), BlackPark - Grigorhill - Newmill Road (U3010) and Allanfearn Farm access track/IN08.21 and Network of paths through Russell's Wood.	Moderate
Substantial adverse effects remain for core paths IN08.15 and IN08.16. These routes would be severed by the proposed Scheme with no crossing points to core path IN08.21 provided at the point of severance. Alternative routes across the proposed Scheme would be available, however these would involve a detour of over 2km.	Substantial

Table 21.7: Summary of Significant Residual Impacts – View from the Road

Residual Impact	Residual Impact Significance	
Assessment of Eastbound from the Proposed Scheme	**Winter Year of Opening**	**Summer (+ 15 years)**
Moderate beneficial impacts would occur in both the winter year of opening and summer after 15 years for the sections of the proposed Scheme from Balloch Junction to Kerrowaird, Inverness Airport to Drumine, Blackcastle Quarry to Mardon House, Meikle Kildrummie to east of Balnaspirach and River Nairn to Crook .	Moderate Beneficial	Moderate Beneficial
Moderate beneficial impacts would occur in the winter year of opening at Balloch Junction and the section of the proposed Scheme from Mardon House to Meikle Kildrummie.	Moderate Beneficial	No longer significant
Moderate adverse impacts would occur in both the winter year of opening and summer after 15 years on the stretches of the proposed Scheme from Crook to Nairn East Junction, where cuttings and woodland would restrict views.	Moderate Adverse	Moderate Adverse
Moderate adverse impacts would occur in summer after 15 years, when a notable reduction in the extents of views would be experienced as a result of passage through cuttings and woodland from Bogside of Boath to Hardmuir.	Not significant in winter of opening year	Moderate Adverse
Assessment of Westbound from the Proposed Scheme		
Moderate beneficial impacts would occurr in both the winter year of opening and summer after 15 years for the sections of the proposed Scheme from Mill of Boath to Nairn East Junction,Crook to the River Nairn, East of Balnaspirach to Meikle Kildrummie, Meikle Kildrummie to Mardon House and Kerrowaird to Balloch Junction.	Moderate Beneficial	Moderate Beneficial
Moderate beneficial impacts would occur in the winter year of opening at Balloch Junction.	Moderate Beneficial	No longer significant
Moderate adverse impacts would occur at stretches of the proposed Scheme from Hardmuir to Bogside of Boath where a notable reduction in the extents of views would be experienced due to cuttings and woodland.	Moderate adverse	No longer significant

Table 21.8: Summary of Significant Residual Impacts – Materials

Residual Impact	Residual Impact Significance
Carbon footprint of replacement materials: Embodied carbon of materials for maintenance (including transport) = ~799,750tCO2e including 10% contingency.	Major (>40,000 tCO2e).