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Environmental Impact Assessment Record of Determination

A9 Drumochter South VRS

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Project Details

Description

BEAR Scotland has been commissioned by Transport Scotland to carry out Vehicle Restraint System (VRS) works in a section of the central reserve of the A9, at the southern extent of the Pass of Drumochter. The works will consist of the replacement of existing VRS, installation of new VRS, and replacement of three existing traffic signs over a length of 1300m (approximately 0.4ha).

The proposed VRS works will consist of:

- Removal of approximately 112 minor trees (category ABCD) and 380m² area of vegetation (including shrubs and scrub)
- Installation of 1888m of safety barrier
- Installation of 3no. terminals
- Removal of 621m of existing Barrier (including 249 posts) classified as being in a poor safety condition
- Removal of 3no traffic signs
- Installation of 3no. traffic signs

The works are currently programmed to be completed within the 2022/2023 financial year (November 2022 to March 2023 inclusive). However, works may be delayed into the first half of the 2023/2024 financial year (April to September 2023 inclusive). Works are expected to be completed over twenty-five days during daylight working hours; however, changes in the programme may result in the need for night works. Traffic management (TM) is currently anticipated to consist of a closure of lane 2 with a 50-mph temporary speed limit. However, if the programme changes, this may result in amendments to the exact TM requirements. Where required, alternative pedestrian routes will be included in the TM setup.

Location

The scheme is located on the A9 trunk road in the Perth and Kinross Council region, towards the southern extent of the Pass of Drumochter (Figure 1).

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Figure 1. Location and scheme extent of the proposed VRS works at A9 Drumochter South. Source: BEAR Scotland. F108 – Environmental Assessment Request (Scheme ref: 22-NW-0801-103).

Description of local environment

Air quality

The scheme is not located within any Air Quality Management Area (AQMA) and no air quality monitoring stations are located in the vicinity of works (<u>Air Quality</u> <u>Scotland</u>). The nearest air quality monitoring site to the scheme is located in Fort William, approximately 62km west of the scheme (<u>Air Quality Scotland</u>). Pollution levels in the general vicinity of works are anticipated to be lower than those at the monitoring station in Fort William due to the remote nature of the scheme location.

There are no sites registered on the Scottish Pollutant Release Inventory (SPRI) (<u>Scotland's Environment</u>) for air pollutant releases within 1km of the scheme.

Baseline air quality at the scheme location is likely to be primarily influenced by traffic along the A9 trunk road.

Cultural heritage

According to Historic Environment Scotland's PastMap (<u>PastMap</u>), there are two Listed Buildings within 300m of the scheme. The nearest of these is the category B listed '*Dalnacardoch Lodge*' (LB6014) which lies 140m west of the scheme. The remaining Listed Building is the category B listed '*Drochaid Dail An Faraoich, bridge carrying former military road over River Garry*' (LB6013) which lies 160m south. There are also several features listed on the Canmore database and Historic Environment Record (HER) within the trunk road boundary and within 300m of the scheme. There are no significant earthworks or excavations associated with the scheme and construction of the A9 road corridor is likely to have removed any archaeological remains that may have been present. In addition, all works are restricted to the central reserve of the A9 carriageway boundary. Therefore, the potential for the presence of unknown archaeological remains in the study area has been assessed to be low (<u>PastMap</u>).

There are no World Heritage Sites, Scheduled Monuments, Garden and Designed Landscapes, Conservation Areas or Inventory Battlefields identified within 300m of the scheme (<u>PastMap</u>).

Landscape and visual effects

The scheme is located within the Cairngorms National Park (CNP) (<u>Sitelink</u>) which has the following special qualities:

1.0 General Qualities

- Magnificent mountains towering over moorland, forest and strath
- Vastness of space, scale and height
- Strong juxtaposition of contrasting landscapes
- A landscape of layers, from inhabited strath to remote, uninhabited upland
- 'The harmony of complicated curves'
- Landscapes both cultural and natural

2.0 The Mountains and Plateaux

- The unifying presence of the central mountains
- An imposing massif of strong dramatic character
- The unique plateaux of vast scale, distinctive landforms and exposed, boulderstrewn high ground
- The surrounding hills
- The drama of deep corries
- Exceptional glacial landforms
- Snowscapes

3.0 Moorlands

• Extensive moorland, linking the farmland, woodland and the high tops

• A patchwork of muirburn

4.0 Glens and Straths

- Steep glens and high passes
- Broad, farmed straths
- Renowned rivers
- Beautiful lochs

5.0 Trees, Woods and Forests

- Dark and venerable pine forest
- Light and airy birch woods
- Parkland and policy woodlands
- Long association with forestry

6.0 Wildlife and Nature

- Dominance of natural landforms
- Extensive tracts of natural vegetation
- Association with iconic animals
- Wild land
- Wildness

7.0 Visual and Sensory Qualities

- Layers of receding ridge lines
- Grand panoramas and framed views
- A landscape of many colours
- Dark skies
- Attractive and contrasting textures
- The dominance of natural sounds

8.0 Culture and History

- Distinctive planned towns
- Vernacular stone buildings
- Dramatic, historical routes
- The wistfulness of abandoned settlements
- Focal cultural landmarks of castles, distilleries and bridges

• The Royal connection

9.0 Recreation

- A landscape of opportunities
- Spirituality

The Landscape Character Type (LCT) within the scheme extent is Upland Glen -Cairngorms (no. 126) (<u>Scottish Landscape Character Types</u>). The Upland Glen -Cairngorms LCT is characterised by:

- Strong evidence of glacial processes, including steepened sides and level floors, shattered rock faces on higher slopes, hummocks of resistant rock on some glen floors and terraces of glacial deposits at the edges of glen floors
- Often form arrival points into the Cairngorms National Park
- Size varies from large open passes to narrower, more secluded glens
- Enclosed predominantly by steep slopes
- Frequently differing land-use on one side of the glen to the other linked to aspect
- Improved, grazed fields on glen floors and floodplains
- Mostly settled, some only sparsely, but often extensive evidence of past settlement, including prehistoric hut circles and associated field systems, pre-improvement townships, and seasonal shielings
- Some landmark historic buildings
- Access varies from narrow roads, estate and forestry tracks to main routes, but most have some form of road running through them
- Varied experience when passing through glens from open and expansive to sheltered and secluded.
- Views to adjacent uplands; from which parts of the glens are visible and provide contrast.

The scheme lies within a rural area, approximately 4km north of Trinafour. The surrounding area is dominated by agricultural grassland and Atlantic parkland, with extensive areas of woodland further afield (<u>Scotland's Environment</u>).

Biodiversity

There are no European sites (Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar sites), biological Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) or Local Nature Reserves (LNRs) within 300m of the scheme extents (<u>SiteLink</u>).

The National Biodiversity Network (NBN) Atlas (<u>NBN Atlas</u>) does not hold records of any protected mammal species within 2km of the scheme during the past ten years however one record of adder (*Vipera berus*) was recorded 1.5km north of the scheme in 2020. Only records with open-use attributions (OGL, CCO, CC-BY) were included in the search criteria.

The NBN Atlas does not hold any records of bird species within 2km over a 10-year period. Under the Wildlife and Countryside Act 1981, all wild birds and their active nests are protected (<u>NBN Atlas</u>).

The NBN Atlas does not hold any records of invasive non-native species (INNS) of plant or injurious weeds under the same criteria.

Transport Scotland's Asset Management Performance System (AMPS) does not hold any records of INNS along the central reserve of the A9 throughout the scheme extent, however two records of common ragwort (*Jacobaea vulgaris*) which lie either side of the central reserve within the scheme extent.

Habitats on either side of the A9 at the scheme location are dominated by a combination of agricultural grassland and Atlantic parkland, with extensive areas of coniferous woodland to the north within Dalnacardoch Wood. The area within the central reserve is dominated by woodland, with broadleaved species to the east and coniferous species to the west. The River Garry lies to the south of the A9 throughout the scheme extent (140m at its nearest point) and provides some freshwater habitat in the area. As the works will be restricted to the central reserve of the A9 carriageway boundary and no in-stream works are required, no impacts to aquatic mammals are predicted.

A site visit was carried out by the BEAR NW Environment Team in October 2022 in order to survey the trees within the central reserve for potential bat roosting locations and signs of nesting birds, and also to survey the area for signs of protected species and INNS.

Woodland throughout the central reserve typically comprised of young trees and consisted of a combination of coniferous species such as pine (*Pinus spp.*), spruce (*Picea spp.*) and fir (*Abies spp.*), alongside a large number of birch trees (*Betula spp.*). All of the trees within the area identified for felling were slim with straight stems and a lack of features suitable for roosting bats, and no trees with bat roosting potential were identified. Correspondence with the scheme designer and BEAR Scotland landscaping team has confirmed that approximately 112 minor category ABCD trees and 380m² area of vegetation (shrub and scrub) has been identified for removal. The remaining woodland within the central reserve is made up of similar species however these are typically larger and more mature. None of the trees within 30m of the planned works were assessed as having any bat roost potential. It is

likely that the more extensive areas of woodland further afield will provide better roosting and foraging habitat for bats. In particular, there is a large riparian corridor to the south of the scheme surrounding the river Garry which is more likely to be used by bat species for roosting, foraging and commuting. No impacts to bat are expected as a result of the works.

There were no signs of nesting birds within the central reserve or surrounding woodland however the survey was completed outside of the bird breeding season. It is possible that birds use the trees within the central reserve to nest during the breeding period, although no obvious nests from the previous breeding season were found during the survey. If vegetation clearance works or VRS works are to take place during the breeding bird period (generally March to August inclusive), then nesting bird checks will be carried out prior to works.

There were no signs of protected species identified during the site visit. More suitable habitat for these species can be found in the larger areas of woodland which lie beyond the A9.

No instances of INNS were recorded on site, however common ragwort and rosebay willowherb (*Chamaenerion angustifolium*) were present along both verges throughout the scheme extent.

No further bat or protected species surveys of the trees are required based on a lack of potential roost features and lack of signs of protected species identified during the survey. If works (or vegetation removal works) are to take place during the breeding bird period, then nesting bird checks will be carried out prior to works. Associated toolbox talks for protected species and working with INNS and injurious weeds will be included in the Site Environmental Management Plan (SEMP) and adhered to on site.

One area (2.97ha) of woodland listed on the Ancient Woodland Inventory (AWI) as Ancient (of semi-natural origin) lies 65m south of the scheme. Works will be restricted to the central reserve of the A9 carriageway boundary and any tree-felling or vegetation clearance will also be restricted to this area. Therefore, no impacts to the AWI woodland are expected.

There are no trees with a Tree Preservation Order (TPO) within the scheme extent.

Geology and soils

The Glen Garry geological Site of Special Scientific Interest (SSSI) lies adjacent to the southbound carriageway, 15m northwest of the scheme. The SSSI is designated for the geological feature Dalradian. The SSSI consists of ten different sites between

the Pass of Drumochter and Calvine, which contain exposures of metamorphic rocks belonging to the Dalradian Supergroup (<u>SiteLink</u>). Although the SSSI boundary is located 15m from the scheme extent, the nearest notified site lies over 300m west of the scheme. All works are restricted to the central reserve of the A9 carriageway boundary and will not entail excavation, tree felling, or other works within the SSSI boundary or close to any notified features. For these reasons, the works are not expected to result in significant impacts on the qualifying features of the Glen Garry SSSI.

The A9 Road Cuttings and River Garry Gorge Geological Conservation Review Site (GCRS) lies 50m west of the scheme at its nearest point. The GCRS is notified as a feature of interest under the Glen Garry SSSI and therefore has statutory protection (<u>SiteLink</u>). All works are restricted to the central reserve of the A9 carriageway boundary and will not entail excavation, tree felling, or other works within the GCRS boundary. Therefore, the works are not expected to result in significant impacts on the qualifying features of the A9 Road Cuttings and River Garry Gorge GCRS.

There are no Local Geodiversity Sites (LGS) with connectivity to the scheme extents (<u>SiteLink</u>).

The bedrock underlying the scheme is comprised of Gaick Psammite Formation (psammite) which is a metamorphic bedrock (<u>BGS GeoIndex</u>). The superficial deposits underlying the scheme are comprised of River Terrace Deposits (gravel, sand, silt and clay) and Hummocky (moundy) Glacial Deposits (diamicton, sand and gravel) which are both sedimentary deposits (<u>BGS GeoIndex</u>).

The Generalised Soil Types beneath the scheme extent are peaty podzols and brown soils (<u>Scotland's Soils</u>). The Major Soil Groups are peaty gleyed podzols and brown earths (<u>Scotland's Soils</u>).

Material assets and waste

The scheme is executed by the operating company as site operations e.g. 'As-of-Right' scheme of value less than £350,000. As a result, a Site Waste Management Plan (SWMP) is not required.

The proposed works are required to upgrade the existing VRS, as well as installing new VRS, and replacing three existing traffic signs. Materials used will consist of:

- VRS materials (beams, posts, end terminals)
- Concrete

The main waste produced during the construction phase will be metal derived from the existing VRS barriers, as well as earth which will be derived from excavations.

Safety barrier posts will predominantly be mechanically driven below ground level where ground conditions permit, however isolated areas of concrete foundations may be required. In this instance, excavated material will not be removed from site, and will instead be re-used on site for backfilling and landscaping in the locality.

Noise and vibration

Works are not located within a Candidate Noise Management Area (CNMA) or Candidate Quiet Area (CQA) (<u>Scotland's Noise Scotland's Environment</u>).

Scotland's strategic noise maps show that day-time noise levels in the vicinity of the trunk road within the scheme extents range between 65 and 70 decibels, with levels dropping to between 55 and 60 decibels at the nearest residential receptor. Baseline air quality at the scheme location is likely to be primarily influenced by traffic along the A9 trunk road (<u>Scotland's Noise Scotland's Environment</u>).

Population and human health

There are two residential properties within 300m of the scheme. Both of these properties are situated within the Dalnacardoch Estate which lies 140m west of the scheme. An access road to these properties diverges from the northbound carriageway at the western scheme extent. There are also several laybys present within the scheme extent.

There are no National Cycle Network (NCN) routes or Core Paths (<u>Scotland's</u> <u>Environment</u>) within the scheme extent however a section of NCN Route 7 utilises the old military road to the south of the scheme (15m at nearest point) (<u>OS Maps</u>). One walking route listed on WalkHighlands (<u>WalkHighlands</u>) '*Gaick Corbetts: An Dun and Meall Creag an Loch*' crosses the A9 at the western scheme extent (making use of the crossing point within the central reserve) and continues northbound through Dalnacardoch Wood (<u>WalkHighlands</u>). There is a short section of paved footpath adjacent to the southbound carriageway at the western scheme extent. This footpath also serves as an uncontrolled crossing point which pedestrians can use to cross the A9 carriageway by utilising the central reserve. The footpath and crossing point will remain open to pedestrians throughout the duration of works.

The nearest traffic count point (ID: 40725) on the A9 is located approximately 300m west of the scheme (<u>Road traffic statistics</u>). Vehicle count data taken from this point in 2021 shows an Average Annual Daily Traffic (AADT) count of 8,201 motor vehicles, of which 1,683 were heavy goods vehicles (<u>Road traffic statistics</u>).

Road drainage and the water environment

There is one watercourse, 'Allt Carn na Saidhe', culverted beneath the A9 within the scheme extent which has not been classified by the Scottish Environment Protection Agency (SEPA) under the Water Framework Directive 2000/60/EC (WFD) however it is shown on the 1:50k Ordnance Survey Map. Allt Carn na Saidhe is considered to be a minor tributary or drainage channel and flows in a southerly direction for approximately 200m before discharging into the River Garry (From Garry Intake to Errochty Water Confluence) (ID: 6911) which was classified by SEPA in 2020 as having an overall status of 'Good' (SEPA water environment hub). The River Garry runs parallel with the trunk road throughout the scheme extent and lies 140m south of the road at its nearest point.

Numerous small minor unclassified surface waterbodies considered to be minor drainage channels or tributaries lie within 300m of the scheme extents.

The scheme falls within the 'Rannoch' groundwater which has been classified as 'Good' (<u>SEPA water classification hub</u>).

The trunk road, within the scheme extents, is not at risk of surface water flooding (<u>SEPA Flood Map</u>).

Climate

The Climate Change (Scotland) Act 2009 sets out the target and vision set by the Scottish Government for tackling and responding to climate change (<u>The Climate</u> <u>Change (Scotland) Act 2009</u>). The Act includes a target of reducing CO2 emissions by 80% before 2050 (from the baseline year 1990). The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amended the Climate Change (Scotland) Act 2009 to bring the target of reaching net-zero emissions in Scotland forward to 2045 (<u>Climate Change (Emissions Reduction Targets</u>) (Scotland) Act 2019.

The Scottish Government has since published its indicative Nationally Determined Contribution (iNDC) to set out how it will reach net-zero emissions by 2045, working to reduce emissions of all major greenhouse gases by at least 75% by 2030 (Scotland's contribution to the Paris Agreement: indicative Nationally Determined Contribution - gov.scot (www.gov.scot)). By 2040, the Scottish Government is committed to reducing emissions by 90%, with the aim of reaching net-zero by 2045 at the latest.

Transport Scotland is committed to reducing carbon across Scotland's transport network and this commitment is being enacted through the Mission Zero for Transport (<u>Mission Zero for transport | Transport Scotland</u>). Transport is the largest contributor to harmful climate emissions in Scotland. In response to the climate emergency, Transport Scotland are committed to reducing their emissions by 75% by 2030 and to a legally binding target of net-zero by 2045.

Policies and plans

This Record of Determination has been undertaken in accordance with all relevant regulations, guidance, policies and plans, notably including the Environment and Sustainability Discipline of the Design Manual for Roads and Bridges (<u>Design</u> <u>Manual for Roads and Bridges (DMRB)</u>) and Transport Scotland's Environmental Impact Assessment Guidance (<u>Guidance - Environmental Impact Assessments for road projects (transport.gov.scot)</u>).

Description of main environmental impacts and proposed mitigation

Air quality

Construction activities associated with the proposed works have the potential to temporarily cause local air quality impacts. Activities undertaken on site may cause dust and particulate matter to be emitted to the atmosphere. However, taking into account the nature and scale of the works and the following mitigation measures, the risk of significant impacts to air are considered to be low.

- All plant, machinery and vehicles associated with the scheme must be maintained to the appropriate standards and must be switched off when not in use.
- All delivery vehicles carrying material with dust potential will be covered when travelling to or leaving site, preventing the spread of dust beyond the work area.
- Material stockpiles will be reduced as much as reasonably practicable by using a 'just in time' delivery system. All material will also be stored on made ground.
- Any stockpiled material on site will be monitored daily to ensure no risks of dust emissions exists.
- Materials should be removed from site as soon as is practicable.
- Good housekeeping will be employed throughout the work.

With the above mitigation measures in place, it is anticipated that any air quality effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this Record of Determination (RoD).

Cultural heritage

The proposed works are not anticipated to have an adverse impact on cultural heritage as the works will be restricted to the central reserve of the A9 carriageway boundary and involve the replacement of existing VRS, installation of new VRS, and replacement of three existing traffic signs. There are no recorded features of cultural heritage within the works footprint. The following good practice measures will be in place to reduce the risk of impacts to undiscovered features of cultural heritage interest:

- Should any unexpected archaeological evidence be discovered, works will stop temporarily in the vicinity and the BEAR Scotland Environment Team contacted for advice.
- People, plant, and materials should, as much as is reasonably practicable, only be present on areas of made / engineered ground. Where access outwith these areas is required for the safe and effective completion of the scheme, it should be reduced as must as is reasonably practicable and ideally be limited to access on foot. There should be no storage of vehicles, plant, or materials against any buildings, walls or fences.

With the above mitigation measures in place, it is anticipated that any cultural heritage effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Landscape and visual effects

There is potential for minor, temporary visual impacts to the local landscape during the construction phase as a result of littering or obstructed views due to vehicles and machinery. However, proposed works will be restricted to the replacement of existing VRS, installation of new VRS, and replacement of three existing traffic signs. Works will be carried out during daylight hours over twenty-five days and land use will not change as a result of the works. Therefore, the works will not create any significant change to the local landscape and no significant impacts to the CNP are expected. Consultation was carried out with CNP regarding potential impacts of the works on the local landscape. The CNP confirmed that they have no concerns regarding the works. In addition, the following mitigation measures will be put in place during works:

- Throughout all stages of the works, the site must be kept clean and tidy, with materials, equipment, plant and wastes appropriately stored, reducing the landscape and visual effects as much as possible.
- The working area and site compound location will be appropriately reinstated following works.

- Works are to avoid encroaching on land and areas where work is not required or does not have permission to do so. This includes general works, storage of equipment/containers and parking.
- Where applicable, upon completion of the works, any damage to the local landscape should be reinstated as much as is practicable.
- The site will be left clean and tidy following construction.

With the above mitigation measures in place, it is anticipated that any landscape and visual effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Biodiversity

Although there is some suitable habitat for protected species in the vicinity of works, the walkover did not identify any field signs or resting places of protected species, or potential roosting habitat for bats. The scheme has also been programmed for outside of the bird breeding season and the active season for bats. Works will be carried out during daylight hours for a duration of twenty-five days. Any protected species that may be in the vicinity are likely to be accustomed to road noise on the A9 and the scheme is of short duration. Pollution controls and good practice measures to reduce impacts of works will be detailed in the SEMP and adhered to on site. Therefore, with the following mitigation measures in place, the risk of significant impacts on biodiversity are considered to be low:

- If vegetation clearance works or VRS works are to take place during the breeding bird period (generally March to August inclusive), then nesting bird checks will be carried out prior to works.
- Works are to be strictly limited to areas required for access and VRS works. Unnecessary encroachment onto terrestrial or aquatic areas will not be tolerated.
- All construction operatives are to be briefed through toolbox talks prior to works commencing. The toolbox talks will provide information on the legislation, general ecology, and best practice measures for relevant protected species and INNS.
- Site personnel should remain vigilant for the presence of any protected species throughout the works period. Should a protected species be noted during construction, works should temporarily halt until the species has sufficiently moved on. Any sightings of protected species should be reported to the BEAR Scotland Environmental Team.
- Where possible, works should be carried out during daylight hours. If artificial lighting is required, it should be directed away from road verges, woodland, and waterbodies as far as is safe and reasonably practicable.
- A 'soft start' will be implemented on site each day. This will involve switching on vehicles and checking under/around vehicles and the immediate work area for mammals prior to works commencing to ensure none are present and that there is a gradual increase in noise.

- Any excavations, exposed pipes/drains, or areas where an animal could become trapped (e.g. storage containers) will be covered over when not in use, at the end of each shift, and following completion of the works to avoid animals falling in and becoming trapped.
- If fencing is utilised at any point during the works, a gap of 200mm from ground level must be provided, allowing free passage for mammals and preventing entrapment.
- Site personnel should remain vigilant for the presence of INNS in road verges throughout the works period. Should any INNS be identified in working areas, no works may take place within 7m of these areas until the BEAR Scotland Environmental Team can provide further advice.

With the above mitigation measures in place, it is anticipated that any biodiversity effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Geology and soils

Although VRS works will involve minor excavations and earthworks, construction activities are restricted to made ground within the trunk road boundary and are not anticipated to have an adverse impact on geology and soils. With the following mitigation measures in place, the likelihood of significant impacts on geology and soils is low.

- All works are restricted to the central reserve of the A9 carriageway boundary and will not entail excavation, tree felling, or other works within the SSSI or GCRS boundaries.
- Site staff will be made aware of the proximity of the SSSI and GCRS, and there will be no storage of plant/materials or tracking of vehicles within these areas.
- The parking of machinery/personnel and storage of equipment on road verges will be minimised as far as is reasonably practicable.
- Upon completion of the works, any damage to the local landscape (i.e. damage to grass verges) should be reinstated as much as is practicable.
- Topsoil and subsoil reused onsite must be spread evenly in a single layer < 200 mm in height to ensure the soil profile is maintained across the works location.
- Multiple handling of soil derived from excavations must be minimised.
- Topsoil reused onsite must not be traversed by heavy machinery.
- The extent and duration of exposed soil must be kept to the minimum required for the works.
- Mitigation measures to prevent contamination of soils through loss of containment will be strictly adhered to.

With the above mitigation measures in place, it is anticipated that any geology and soils effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Material assets and waste

There is potential for impacts as a result of resource depletion through use and transportation of new materials. However, materials will be sourced locally where possible and the following mitigation measures will be put in place:

- All timber produced during works will be appropriately stored (if required) prior to removal from site.
- Materials will be sourced from recycled origins as far as reasonably practicable within design specifications.
- Care will be taken to order the correct quantity of required materials to prevent the disposal of unused materials.
- Where possible, minimal packaging should be requested on required deliveries to reduce unnecessary waste and production of packaging materials.

There is potential for impacts during works as a result of the improper storage or disposal of waste. The following mitigation measures will be put in place:

- The waste hierarchy (Reduce, Reuse, Recycle and Dispose) will be employed throughout the construction works.
- The subcontractor will adhere to waste management legislation and ensure they comply with their Duty of Care.
- Containment measures will be in place to prevent debris or pollutants from entering the surrounding environment.
- All wastes and unused materials must be removed from site in a safe and legal manner by a licensed waste carrier upon completion of the works. The appointed waste carrier must have a valid SEPA waste carrier registration, a copy of which will be provided to and retained by BEAR Scotland as early as possible.
- All appropriate waste documentation must be present on site and be available for inspection. A copy of the Duty of Care paperwork should be provided and filed appropriately in accordance with the Code of Practice (as made under Section 34 of Environmental Protection Act 1990 as amended).
- Re-use and recycling of waste will be encouraged and the subcontractor will be required to fully outline their plans and provide documentary evidence for waste arising from the works (e.g., waste carrier's licence, transfer notes, and waste exemption certificates).
- Staff will be informed that littering will not be tolerated. Staff will be encouraged to collect any litter seen on site.
- Where applicable, all temporary signage will be removed from site on completion of the works.

With the above mitigation measures in place, it is anticipated that any material assets and waste effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Noise and vibration

Construction activities associated with the proposed scheme works have the potential to cause noise and vibration impacts through the use of equipment and construction vehicles for the proposed activities. The works will take place during daytime working hours. The proposed scheme is anticipated to result in temporary minor adverse noise impacts. The following mitigation measures will be put in place:

- The Best Practice Means, as defined in Section 72 of the Control of Pollution Act 1974, will be employed at all times to reduce noise to a minimum.
- On-site construction tasks should be programmed to be as efficient as possible, with a view to limiting noise disruption to local sensitive receptors.
- All site personnel will be fully briefed in advance of works regarding the need to minimise noise during works and of the site-specific sensitivities.
- All plant, machinery and vehicles will be switched off when not in use.
- All plant will be operated in such a way that minimises noise emissions and will have been maintained regularly to the appropriate standards.
- Where fitted, and where permitted under Health and Safety requirements, white noise reversing alarms should be utilised during construction.
- Where ancillary plant such as generators are required, they will be positioned so as to cause minimum noise disturbance. Where deemed necessary, acoustic screens will be utilised.

With the above mitigation measures in place, it is anticipated that any noise and vibration effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Population and human health

During construction, activities undertaken on site may have temporary adverse impacts on local residents, vehicle travellers, and non-motorised road users (NMUs) as a result of vehicle noise and delays due to traffic management measures. Local residents will be notified of works via letter drop and road users will be informed of works through a media release, which will provide details of construction dates and times. With the following mitigation measures in place, the risk of significant impacts on population and human health is considered to be low:

• Where possible, works should be carried out during daylight hours.

- Appropriate provisions / measures should be implemented within the traffic management to allow the safe passage of NMUs of all abilities through the site.
- All pedestrian facilities will remain open and will be available for use during the construction stage.
- Journey planning information will be available for drivers online at the trafficscotland.org website. Journey planning information will also be available for drivers online through BEAR's social media platforms.

With the above mitigation measures in place, it is anticipated that any population and human health effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Road drainage and the water environment

During VRS works, there is potential for temporary impacts on the water environment. Potential changes in water quality from pollution events (either by accidental spillage of sediments, particulate matter, chemicals, fuels or by mobilisation of these in surface water caused by rain or tidal movements) during works have the potential to have a direct or indirect effect on the surrounding waterbodies. The following mitigation measures will be put in place to reduce the risk of pollution incidents as a result of works:

- The scheme will not entail any in-stream works.
- Standard working practices to comply with The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) for works in or near water will be detailed in the SEMP and adhered to on site.
- No discharges into any watercourses or drainage systems are permitted. Appropriate containment measures must be in place to prevent any loss of construction materials into the water environment.
- An incident response (contingency) plan will be put in place to reduce the risk from pollution incidents or accidental spillages. All necessary containment equipment, including suitable spill kits (for oil and chemicals) will be available on site, quickly accessible if needed, and staff trained in their use.
- All spills must be logged and reported. In the event of any spills into the water environment, all works must stop and the incident must be reported to the project manager and the BEAR Scotland Environmental Team. SEPA must be informed of any such incident as soon as possible using the SEPA Pollution Hotline.
- All plant and equipment must be regularly inspected for any signs of damage and leaks. A checklist must be present to make sure that the checks have been carried out.
- Storage of COSHH material, oil and fuel containers should be distanced more than 10m away from any watercourses.

- If required, a designated refuelling area must be identified. Fuel bowsers should be stored on an impermeable area and be fully bunded. This should be distanced more than 10m from any watercourses.
- During refuelling of smaller mobile plant, a funnel must be used, and drip trays must be in place. Care must be taken to reduce the chance of spillages. Spill kits must be quickly accessible to capture any spills should they occur. The ground / stone around the site of a spill must be removed, double bagged and taken off site as special contaminated waste.
- Generators and static plant may have the potential to leak fuel and / or other hydrocarbons and must have bunding with a capacity of 110%. If these are not bunded then drip trays should also be supplied beneath the equipment with a capacity of 110%.

With the above mitigation measures in place, it is anticipated that any road drainage and the water environment effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Climate

Construction activities associated with the proposed scheme works have the potential to cause local air quality impacts as a result of the emission of greenhouse gases through the use of vehicles and machinery, material use and production, and transportation of materials to and from site. The following mitigation measures will be put in place:

- BEAR Scotland will adhere to their Carbon Management Policy.
- Where possible, the works will be undertaken utilising a daytime work pattern to reduce the requirement for additional lighting.
- Local contractors and suppliers will be used as far as practicable to reduce fuel use and greenhouse gas emitted as part of the works.
- Where possible, materials will be sourced locally to reduce greenhouse gas emissions associated with materials movement, and waste will be disposed at local landfill.
- BEAR Scotland participate in CEEQUAL.

With the above mitigation measures in place, it is anticipated that any climate effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Major Accidents and Disasters

The trunk road, within scheme extents, is not at risk of surface water flooding.

Works are restricted to the made ground of the A9 carriageway and traffic management will be designed in line with existing guidance. The proposed works are anticipated to last 25 days utilising a daytime working programme. Traffic management will consist of closure of lane 2 with a 50-mph temporary speed limit. Where required, alternative pedestrian routes will be included in the traffic management setup, to minimise impact of the works on NMUs.

These measures, along with mitigation measures and standard working practices, will be detailed in the SEMP and adhered to on site. The vulnerability of the project to risks of major accidents and disasters is considered to be low.

Assessment of cumulative effects

The proposed works are not anticipated to result in significant environmental effects. Due to the nature of the proposed works, no cumulative effects are anticipated with any other developments in the vicinity. A search of the Perth and Kinross Planning Portal (<u>Map Search</u>) confirmed that there are no planning applications within 300m of the scheme. A search of the Scottish Roads Works Commissioner website (<u>Map Search</u>) has identified that no other roadworks are currently ongoing, or noted as being planned, on the trunk road at the same time as this scheme. There are also no local authority road networks in proximity to the scheme. Due to the nature of the proposed works, no cumulative effects are anticipated with any other developments in the vicinity.

BEAR Scotland programme all of their proposed works in line with appropriate guidance and contractual requirements. All schemes are programmed to take into account existing and future planned works, with a view of limiting any cumulative effects relating to traffic management. As a result of this exercise, where a potential for cumulative impacts is identified, BEAR will reprogramme schemes to avoid / limit any cumulative effects or will utilise existing traffic management to complete multiple schemes at once. This approach allows BEAR Scotland to effectively manage the potential cumulative effects as a result of traffic management, resulting in minimal disruption to users of the Scottish trunk road network. Overall, it is unlikely that the proposed works will have a significant cumulative effect with any other future works in the area.

Assessments of the environmental effects

As detailed in the Description of Main Environmental Impacts and Proposed Mitigation section, there are no significant effects anticipated on any environmental receptors as a result of the proposed works.

Statement of case in support of a Determination that a statutory EIA is not required

This is a relevant project in terms of section 55A(16) of the Roads (Scotland) Act 1984 as it is a project for the improvement of a road and the completed works (together with any area occupied by apparatus, equipment, machinery, materials, plant, spoil heaps, or other such facilities or stores required during the period of construction) are situated in whole or part in the Cairngorms National Park which is a sensitive area within the meaning of regulation 2(1) of the Environmental Impact Assessment (Scotland) Regulations 1999.

The project has been subject to screening using the Annex III criteria to determine whether a formal Environmental Impact Assessment (EIA) is required under the Roads (Scotland) Act 1984 (as amended by The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017). Screening using Annex III criteria, reference to consultations undertaken, and review of available information has not identified the need for a statutory EIA.

The project will not have significant effects on the environment by virtue of factors such as:

Characteristics of the scheme:

- The total working area is less than 1 ha.
- Tree felling will be limited to the minimum area necessary to facilitate VRS works and will be restricted to the central reserve.
- No felling of woodland listed on the AWI is required and there are no TPOs within the scheme extent.
- Works are currently programmed to take place outwith the bird breeding season, however if the programme changes and vegetation clearance works or VRS works are to take place during the breeding bird period, then nesting bird checks will be carried out prior to works.
- No bats, or evidence of bats were found during the site visit in October 2022 and no trees with bat roosting potential were identified within 30m of the planned works.
- No signs of other protected species were recorded on site during the survey.
- All works are restricted to the central reserve of the A9 carriageway boundary and will not entail excavation, tree felling, or other works within the SSSI or GCRS boundaries.

- The works will be temporary, localised and will be completed during daylight hours.
- Containment measures of the working area will be in place to prevent debris or pollutants from entering the surrounding environment.
- Works are not expected to result in significant disturbance to protected species that may be present in the wider area.
- In the event that INNS are found on site, measures to prevent potential INNS spread will be implemented.
- No in-combination effects have been identified.
- The risk of major accidents or disasters is considered to be low.

Location of the scheme:

- Works will not have a significant impact on the Cairngorms National Park.
- Any impacts to the local landscape during the construction phase will be minor, temporary and not considered significant. In addition, no operational impacts are anticipated.
- The site compound will be located on made ground.

Characteristics of potential impacts of the scheme:

- Any potential impacts of the works are expected to be temporary, short-term, non-significant, and limited to the construction phase.
- Measures will be in place to ensure appropriate removal and disposal of waste.
- The SEMP will include plans to address environmental incidents.
- No impacts on the environment are expected during the operational phase as a result of works. The works are expected to result in positive impacts on road users during the operational phase.
- Mitigation measures detailed above and in the SEMP are put in place with the objective to prevent and, if required, subsequently control any potential impacts on sensitive receptors.

Annex A

"sensitive area" means any of the following:

- land notified under sections 3(1) or 5(1) (sites of special scientific interest) of the Nature Conservation (Scotland) Act 2004
- land in respect of which an order has been made under section 23 (nature conservation orders) of the Nature Conservation (Scotland) Act 2004
- a European site within the meaning of regulation 10 of the Conservation (Natural Habitats, &c.) Regulations 1994
- a property appearing in the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention for the Protection of the World Cultural and Natural Heritage
- a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979
- a National Scenic Area as designated by a direction made by the Scottish Ministers under section 263A of the Town and Country Planning (Scotland) Act 1997
- an area designated as a National Park by a designation order made by the Scottish Ministers under section 6(1) of the National Parks (Scotland) Act 2000.



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