

Environmental Impact Assessment Record of Determination

A9 Essangal 670 - Expansion Joint Replacement, Resurfacing & Partial Deck Refurbishment

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Project Details

Description

BEAR Scotland has been commissioned by Transport Scotland to carry out a replacement of bridge expansion joints, resurfacing, and partial deck refurbishment at the A9 Essangal bridge, located on the A9 south of Blair Atholl. The works will consist of like-for-like replacement of the bridge expansion joints as well as areas of localised resurfacing and deck refurbishment. This is required due to the failure of the existing joints and bridge deck surface.

The total length of the scheme is 165m with approximately area of 0.2ha.

The works are currently programmed to commence in September 2024 and will utilise nighttime working hours (20:00 - 06:00), with an expected duration of up to 10 nights.

Traffic management (TM) will involve alternating single lane closures, facilitated by temporary traffic lights (TTLs). 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 Essangal bridge, which lies approximately 2km southeast of Blair Atholl within the Perth and Kinross Council area (Figure 1). The National Grid Reference (NGR) for the A9 Essangal bridge (measured at the centre of the bridge deck) is NN 89101 64273.

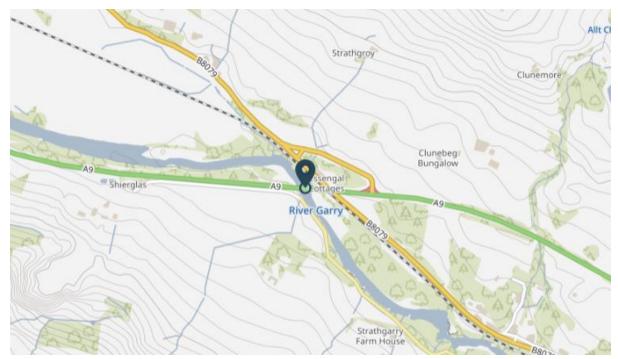


Figure 1. Location and scheme extent of the proposed joint replacement and resurfacing works at A9 Essangal bridge. Source: BEAR Scotland. F108 – Environmental Assessment Request (Scheme ref: 23-NW-1201-35).

Description of local environment

Air quality

The scheme is not located within an Air Quality Management Area (AQMA) declared by Perth and Kinross Council (Air Quality in Scotland).

No Air Quality Monitoring Stations (AQMS) are located within 10km of the proposed works. The closest AQMS is approximately 42km south of the scheme, in Crieff, where nitrogen dioxide (NO₂) and particulate matter (PM_{2.5} and PM₁₀) levels were recorded to be low at the time of the search (<u>Air Quality in Scotland</u>). As the scheme is located within a more rural area, it is expected that levels at the scheme extents are lower than levels recorded at the Crieff station.

There are no Scottish Pollutant Release Inventory (SPRI) sites registered for air pollutants, located within 10km of the scheme (Scotland's Environment).

Baseline air quality is likely to be primarily influenced by traffic along the A9. The Highland Main Line railway line (with associated land) is spanned by the A9 at the scheme extents. Occasional train movement will therefore also have an impact. However, it is likely that train movements will be infrequent.

Cultural heritage

There are several cultural heritage sites located within 300m of the proposed works, including:

One category B Listed Building 'Limekiln, near Essangal'; which lies approximately 150m north of scheme extents.

The A9 Essangal lies within 'Battle of Killiecrankie' battlefield boundaries. The battlefield is also noted as a Historic Environment Record (HER).

Several other HERs lie within 300m of the scheme.

Two Canmore records; the closest of these is a record of a military road and lies approximately 170m north of scheme extents.

No Scheduled Monuments, Conservation Areas, Garden & Designed Landscapes, or World Heritage Sites were identified within 300m of the scheme (PastMap).

The construction of the A9 trunk road, A9 Essangal bridge and spanned railway line are likely to have impacted any items of cultural heritage interest present.

The works are confined to the A9 Essangal bridge deck and will include like-for-like replacement of the bridge joint and minor deck surface refurbishment, therefore the works will not alter the record of 'Battle of Killiecrankie' battlefield and its associated HER. The works also do not required earthworks or works out of the A9 Essangal bridge deck and construction of the transport corridors is likely to have removed any archaeological remains that may have been present within the area and as such 'cultural heritage' is scoped out and is not discussed further within this RoD.

Landscape and visual effects

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

I.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 scheme does not fall within any National Scenic Areas (SiteLink).

The A9 Essangal bridge lies in a semi-rural area approximately 2km east of Blair Atholl and spans the River Garry and the Highland Main Railway Line. Land surrounding the scheme is dominated by areas of deciduous riparian woodland, shingle beaches, grazing pastures, arable land, and a freshwater habitat provided by the River Garry.

The Landscape Character Type (LCT) within the scheme extents is categorized as 'Broad Glen with Estates (no. 129) (<u>Scottish Landscape Character Types</u>), which is characterised by:

- Large glens
- Contained by high, rounded hills.
- Flat, broad strath floors, sometimes constricted into rocky wooded gorges, housing the upper/mid sections of major rivers flowing down from the Cairngorms.
- The rivers are a feature whether meandering in sinuous loops or faster-flowing along boulder-strewn stretches.
- Number of side glens cut by tributary streams/burns.
- Pastures on valley floors, interspersed with policy tree planting and stretches of riparian woodland.
- Policy woodlands that often include areas of parkland trees.
- Extensive woodlands: steeper slopes have conifer forest with some heather moorland on open hills.
- Settlements at bridging points and crossroads.

- Large estate houses and castles with associated lodges, cottages and steadings.
- Diverse landscape character with much visual interest.

Historic Environment Scotland's HLAMap (<u>HLAMap</u>) has highlighted that the surrounding landscape is dominated by managed woodlands, rectilinear fields and farms.

The A9 Trunk Road, within the North West, connects Perth with Thurso. It commences immediately north of Inveralmond Roundabout in Perth leading generally northwards for a distance of 357 kilometres to its junction with an unclassified road leading to Holborn Head lighthouse at Scrabster. The A9 is a mixture of single carriageway, '2+1' carriageway and stretches of two-lane dual carriageway.

Biodiversity

A desktop study identified the River Tay Special Area of Conservation (SAC) (<u>SiteLink</u>) and Tulach Hill and Glen Fender Meadows SAC (<u>SiteLink</u>) within 2km of the scheme extents.

The A9 Essangal bridge spans the River Garry, which forms a part of the River Tay SAC.

The Tulach Hill and Glen Fender Meadows SAC is located approximately 700m southwest of scheme extents.

A Habitats Regulations Appraisal (HRA) has been undertaken to assess the works' potential impact on European sites with connectivity to the scheme. Refer to the assessment section for Biodiversity below for details.

Aldclune and Invervack Meadows Site of Special Scientific Interest (SSSI) covers an area along the northeast bank of the River Tay and is spanned by the A9 Essangal Bridge within the scheme extents. It is designated for lowland calcareous grassland.

Numerous bird species are also recorded on NBN Atlas within the same search criteria and under the Wildlife and Countryside Act 1981 (WCA), all wild birds and their active nests are protected.

The NBN Atlas does not hold records of invasive non-native species (INNS) of plants, as listed on Schedule 9 of the WCA, injurious weeds, as listed under the Weeds Act 1959, or invasive native perennials, as listed in the Trunk Road Inventory Manual under the same criteria.

Transport Scotland's Asset Management Performance System (AMPS) was also used for search of INNS of plants, invasive native perennials and injurious weeds (denoted by*) within 300m of scheme extents and returned the following records:

 Rosebay willowherb (Chamaenerion angustifolium) - two records located approximately 200m west of scheme extents. • Common ragwort* (Senecio jacobae) - one record approximately 50m east of scheme extents.

A search using AMPS did not identify records of INNS.

Habitats surrounding the bridge are dominated by areas of deciduous riparian woodland, shingle river banks and islands, grazing pastures, arable land, and freshwater habitat which is provided by the River Garry.

One area of woodland as listed on the Ancient Woodland Inventory (AWI) lies within 300m of the scheme's footprint. This woodland is located approximately 250m east of scheme extent and is listed as 'ancient (of semi-natural origin)' (NatureScot).

There are no areas of woodland or individual trees covered by a Tree Preservation Order (TPO) within 300m of the scheme extents (<u>Perth and Kinross Council</u>).

A preliminary ecological appraisal (PEA) and a preliminary roost assessment (PRA) were carried out on 19th of March 2024 by the BEAR Scotland ecologists.

No INNS, invasive native perennials or injurious weeds were recorded during the survey.

Geology and soils

Soils within the scheme extent are recorded as humus-iron podzols with mineral alluvial soils with peaty alluvial soils (<u>Scotland's Soils</u>).

The scheme is located in a 'Class 0' category of carbon and peatland importance, which indicates mineral soils, and peatland habitats are not typically found in such soils.

Bedrock recorded within scheme extent is listed as 'Blair Atholl Dark Limestone', which is a metamorphic bedrock (<u>BGS Geology Viewer</u>).

Superficial deposits within scheme extents are recorded as 'Alluvium – clay, silt, sand and gravel', which is a sedimentary superficial deposit (BSG Geology Viewer).

The works are confined to the made ground of the A9 Essangal bridge deck, and as such it has been determined that the proposed project does not carry the potential to cause direct or indirect impact to geology or soils. As such, impact has been assessed as being 'no change' and has been scoped out of requiring further assessment.

Material assets and waste

The proposed works will include reinstatement of the bridge joints and the bridge deck surface course. Materials used will consist of:

- Expansion joint materials
- Asphaltic material (surface and binder)

Waterproofing materials

Wastes are anticipated to be old expansion joint materials and planings from the bridge deck surface course. These planings will be fully recovered for re-use in line with BEAR Scotland's Procedure 126: The Production of Fully Recovered Asphalt Road Planings, where not contaminated with coal tar. The Contractor is responsible for the disposal of road planings and this has been registered in accordance with a Paragraph 13(a) waste exemption issued by SEPA, as described in Schedule 3 of the Waste Management Licensing Regulations 2011.

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.

Noise and vibration

Residential, community and commercial receptors – refer to the 'Population and Human Health' section below.

The scheme is not located within a Candidate Noise Management Area (CNMA) as defined by the Transportation Noise Action Plan (TNAP).

The Scotland's noise map (<u>Scotland's Noise</u>) did not return noise data for the scheme extents. However, it is expected that the noise levels at the scheme extent are mainly influenced by traffic flow along the A9 and local road network. Secondary sources are likely to be derived by rail movements along the Highland Main Line railway line, which is spanned by the A9 Essangal bridge.

In 2022, the average annual daily flow (AADF) of traffic was measured on the A9 carriageway (approximately 8km southeast of scheme extents) and accounted for 10,807 vehicles, including 1179 (10.9%) heavy goods vehicles (HGVs) (Road Traffic Statistics).

Population and human health

Two residential properties lie within 300m. The closest of these is located approximately 30m northwest (3m below the level of the bridge deck) of the scheme extents with only limited acoustic or visual screening present from the A9 Essangal bridge. Access to these properties is via the B8079, therefore, residents will not have access impacted by the proposed works.

National Cycle Network (NCN) Route 7 is spanned by the A9 Essangal bridge within scheme extents with no connectivity from the works present (OS Maps).

No walking routes listed on WalkHighlands (<u>WalkHighlands</u>) or core paths are located within 300m of scheme extents (Scotland's Environment).

Road drainage and the water environment

The River Garry (Errochty Water Confluence to Loch Faskally) (ID: 6836), is spanned by A9 Essangal bridge within scheme extents. The river falls within the River Tay catchment area and has been classified by the Scottish Environment Protection Agency (SEPA) under the Water Framework Directive 2000/60/EC (WFD) in 2022 as having 'good ecological potential' (SEPA Water Classification Hub).

No other classified surface waterbodies are present within 300m, however numerous minor tributaries and/or drainage channels lie within 300m of the scheme.

The scheme is located within the 'Tummel and Tay Sand and Gravel' (ID: 150735) and 'Blair Atholl' (ID:150639) groundwater bodies, which were both classified by SEPA as having an overall status of 'good' in 2022 (<u>SEPA Water Classification Hub</u>). Both are also recorded as Drinking Water Protected Areas (DWPA) (Ground) (DWPA).

No surface water DWPAs are recorded within 300m of the scheme.

No areas on the A9 Essangal bridge were highlighted as having likelihood of water flooding (<u>SEPA Flood Maps</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 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 <u>Nationally Determined</u> <u>Contribution</u> (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 (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 (Mission Zero for transport | Transport Scotland). 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 (RoD) has been undertaken in accordance with all relevant regulations, guidance, policies and plans, notably including the Environment

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and Sustainability Discipline of the <u>Design Manual for Roads and Bridges</u> and Transport Scotland's <u>Environmental Impact Assessment Guidance</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 will be maintained in order to minimise emissions, as per manufacturing and legal requirements. No significant dust, particulate matter, and exhaust emissions sources will be introduced by the works.
- Green driving techniques will be adopted, and effective route preparation and planning will be undertaken prior to works.
- 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.
- Activities involving cutting/planing will be appropriately managed to reduce the potential for dust creation. This will involve use of measures such as dampening down or on tool extraction where required.
- Material stockpiles will be reduced as far as is 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 will be removed from site as soon as is practicable.
- Good housekeeping will be employed throughout the work.
- Drop heights to haulage vehicles and onto conveyors will be minimised.
- Surfaces will be swept where loose material remains.

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 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 obstructed views due to vehicles and machinery. However, proposed works will be restricted to like-for-like bridge joint replacement, deck refurbishment and resurfacing on the A9 Essangal bridge deck and land use will not change as a result of the works. Upon completion of the works, no residual impacts are anticipated e.g., when complete the visual appearance will remain largely unaffected, with replaced bridge joints and surface being the only discernible change. CNP will be notified of the proposed works and advised on traffic arrangements.

In addition, the following mitigation measures will be put in place during works:

- Throughout all stages of the works, the site will 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 will be appropriately reinstated following works.
- Works will avoid encroaching on land and areas where work is not required or is not permitted. This includes general works, storage of equipment/containers and parking.
- Where applicable, upon completion of the works, any damage to the local landscape will 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

Designated Sites

The A9 Essangal bridge spans the River Garry, which forms a part of the River Tay SAC. BEAR Scotland carried out an Appropriate Assessment as part of a HRA to comply with the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). The Appropriate Assessment concluded that, although Likely Significant Effects (LSE) on the River Tay SAC could not be ruled out, the proposed works will not result in an adverse effect on site integrity (AESI) with the specified mitigation in place. The Appropriate Assessment was approved by NatureScot and Transport Scotland as the Competent Authority. All relevant good practice measures will be detailed in the Site Environmental Management Plan (SEMP) and adhered to during

works. As such, no significant impacts on the River Tay European Site are anticipated by virtue of the following factors:

- All works are restricted to engineered ground of the A9 bridge deck; therefore, works will not result in direct alteration or removal of this aquatic habitat feature or fish species with association of the SAC.
- No in-stream works will take place. Good working practices for working near water that are utilised as a standard by BEAR Scotland practices and will be in place during works and will include robust containment measures to prevent pollution from entering the surrounding environment and no significant dust, particulate matter, and exhaust emissions sources will be introduced by the works. Consequently, there is very limited connectivity between the area of works and this qualifying aquatic habitat with the River Tay SAC and the risk of direct or indirect effects on the habitat feature of the SAC as a result of proposed works is very low.
- All proposed maintenance activities will be temporary, highly-localised, and limited to the bridge structure, with adequate mitigation present to avoid the disturbance on surrounding landscape.

Likewise, for the same factors as for River Tay European site, the works will not have a negative impact on Aldclune and Invervack Meadows SSSI.

Due to the lack of connectivity, distance and non-mobile nature of the Tulach Hill and Glen Fender Meadows SAC designated features, no potential for LSE on this site was identified. Therefore, no HRA was undertaken for this site.

Terrestrial Ecology

Ecological surveys carried out did not identify protected mammal species within the scheme disturbance buffers.

The site visit did not identify any INNS, invasive native perennials or injurious weeds within the scheme extents. There is no requirement to import topsoil and the excavated ditching material will be spread within the ditch verges. As such, there is limited potential to spread or introduce INNS, invasive native perennials, or injurious flowering plant species.

During road resurfacing and expansion joint replacement, activities undertaken on site could potentially have a temporary adverse impact on biodiversity in the area as a result of an increased vehicle presence and the potential for disturbance to protected species and pollution of habitats. However, any protected species in the area are likely to be accustomed to traffic noise on the A9. Pollution controls and good practice measures to reduce impacts of works on the local environment 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:

- Works will be strictly limited to areas required for access and the works.
 Unnecessary encroachment onto terrestrial or aquatic areas will not be tolerated.
- Mitigation as outlined within the HRA, and where further advised by NatureScot, will be enacted on-site.
- Site personnel will remain vigilant for the presence of protected species throughout the works period. Should a protected species be noted during construction, works will temporarily halt, until such time that the species has sufficiently moved on.
- Relevant toolbox talks for working with protected species will be included in the SEMP.
- Measures to be implemented to protect the aquatic environment are detailed in the Road Drainage and Water Environment section below.
- No discharges into any watercourses or drainage systems will be permitted.
- A 'soft start' will be implemented on site each day. This will involve switching
 on vehicles and checking under/around vehicles and the immediate works
 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.
- Artificial lighting used during hours of darkness (if required) will be restricted
 to the immediate working area and will be directed away from areas of
 suitable habitat (e.g. watercourses, woodland, shrubs) as far as is safe and
 reasonably practicable.
- If an active bird nest is found in the vicinity of works, all works within 30m of the nest will stop until the BEAR Scotland Environment Team can provide advice.

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:

- 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 will 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.
- Uncontaminated road planings will be re-used or recycled under a SEPA Paragraph 13(a) waste exemption and in line with BEAR Scotland's Procedure 126: The Production of Fully Recovered Asphalt Road Planings.
- All wastes and unused materials will be removed from site in a safe and legal manner by a licensed waste carrier upon completion of the works, unless otherwise stated. The appointed waste carrier will 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 will be present on site and be available
 for inspection. A copy of the Duty of Care paperwork will 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 works have the potential to cause noise and vibration impacts through the use of equipment and construction vehicles for the proposed activities. Works will be undertaken utilising a nighttime working programme, however, the works are not located within a CNMA or CQA. Although, there are only a limited screening provided between the scheme and residential properties, it is expected that the proximity of road space and railway line suggests that residents within the local area will have a degree of tolerance to noise and disturbance. Following the completion of the works, replaced bridge joints and road surfacing will significantly reduce the noise and vibration currently produced by passing vehicles over the bridge deck.

The following mitigation measures will be put in place:

- The Environmental Health Officers (EHO) from Perth and Kinross Council will be notified of works.
- Where possible, the noisiest work operations (e.g., cold milling, using breakers (jackhammers), chipping hammers, use of rollers, etc.) will be completed before 23:00.
- 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.
- 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.
- 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.
- On-site construction tasks will be programmed to be as efficient as possible, with a view to limiting noise disruption to local sensitive receptors.
- 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 will 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 vehicle travellers and non-motorised road users (NMUs) as a result of vehicle noise and delays due to traffic management measures. Road users will be informed of works through a media release, which will provide details of construction dates and times. There are no pedestrian facilities within the scheme.

No significant congestion issues are noted during the proposed construction hours; however increased journey times may occur, but these are considered insignificant considering the relatively low traffic counts and works being undertaken out of the traffic peak hours.

There are no pedestrian present within the scheme extents and access to nearby properties will not be disrupted.

With the following mitigation measures in place, the risk of significant impacts on population and human health is considered to be low.

- Local residents will be notified of the impending works. Information will
 provide contact details (office phone number and e-mail address) for the
 Project Engineer as well as a 24-hour contact number for the BEAR Scotland
 Control Room.
- Given the proximity of urban development to the scheme extents, the Toolbox Talk TTN-042 'Being a Good Neighbour' will be briefed prior to works commencing.
- Construction lighting will consider the need to avoid illuminating surrounding environment to avoid a nuisance at night, and non-essential lighting will be switched off at night.
- Any changes of schedule (e.g. change from night-time works to daytime works) will be communicated to travelling public throughout the programme.

- Appropriate provisions / measures will be implemented within the traffic management to allow the safe passage of NMUs of all abilities through the site (if required).
- 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 Scotland'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

There is potential for temporary impacts on the water environment due to operation of plant within and within proximity to watercourses and/or drainage systems, which may lead to 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). No in-water works will take place and there is no requirement for the abstraction or transfers of water from, or discharges to, a waterbody. As such, the potential for a direct pollution incident within a waterbody is low. Experience gained from BEAR Scotland maintenance schemes elsewhere on the network has shown that where standard good working practice is adopted (e.g., adherence to SEPA good practice guidance, utilisation of drain covers or similar, etc.), water quality is protected.

The following mitigation measures will be put in place to reduce the risk of pollution incidents as a result of works:

- Standard working practices to comply with The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) for works near water are detailed in the SEMP and will be adhered to on site.
- The scheme will not entail any in-stream works.
- No discharges into any watercourses or drainage systems will be permitted.
 Appropriate containment measures will 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 will be logged and reported. In the event of any spills into the water environment, all works will stop, and the incident will be reported to the project

manager and the BEAR Scotland Environmental Team. SEPA will be informed of any such incident as soon as possible using the SEPA Pollution Hotline.

- All plant and equipment will be regularly inspected for any signs of damage and leaks. A checklist will be present to make sure that the checks have been carried out.
- Storage of hazardous material, oil and fuel containers will be distanced more than 10m away from any watercourses.
- If required, a designated refuelling area will be identified. Fuel bowsers will be stored on an impermeable area and be fully bunded. This will be distanced more than 10m from any watercourses.
- During refuelling of smaller mobile plant, a funnel will be used, and drip trays will be in place. Care will be taken to reduce the chance of spillages. The ground / stone around the site of a spill will be removed, double bagged and taken off site as special waste.
- Generators and static plant may have the potential to leak fuel and / or other hydrocarbons and will have bunding with a capacity of 110%. If these are not bunded, then drip trays will 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.
- 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 material movement, and waste will be disposed at local landfill.

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

There are no surface water flooding issues noted within the A9 carriageway at the scheme extents and the works will not increase impermeable surface areas therefore, increased flooding issues at the scheme extents are not anticipated following the works. The works will also be programmed as far as is reasonably practicable to avoid periods of adverse weather or heavy rainfall.

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 up to 10 nights, utilising nighttime working hours. TM will involve alternating single line closures, facilitated by TTLs. Where required, alternative NMU provisions/routes will be included in the traffic management setup, to minimise impact of the works on NMUs.

A Traffic Management Plan (TMP), which includes measures to avoid or reduce disruption to road traffic, will be produced in accordance with the Traffic Signs Manual (Department of Transport 2009). The TMP will ensure that there is no severance of community assets, access routes or residential development.

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 & Kinross Council Planning Portal (Map Search) did not identify any approved planning applications within 300m of the scheme in the last year.

A search of the Scottish Roads Works Commissioner's website (Map Search) has identified that no other roadworks noted as being planned, on the trunk road at the same time as this 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

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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 within this Record of Determination, there are no significant effects anticipated on any environmental receptors as a result of the proposed works. An Appropriate Assessment as part of a Habitat Regulations Appraisal has been undertaken and determined that the works will not result in an AESI on designated features of the River Tay SAC with the specified mitigation in place.

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) is situated in whole, or in part, within the Cairngorms NP, which is noted as 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 and review of available information has not identified the need for a statutory EIA.

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

Characteristics of the scheme:

- Works are restricted to like-for-like replacement of worn-out expansion joints and bridge deck surface on the A9 Essangal bridge.
- Construction activities are restricted to an area of 0.2ha along a 165m stretch of the A9.
- The works will be temporary, localised, and completed during night-time hours over up to 10 nights.
- By replacing the worn-out bridge joints on the A9 Essangal bridge will ensure structural integrity of the bridge structure and in turn will significantly improve the ride quality, which will result in safer conditions for road users.

- There are no protected mammal species noted within the works disturbance buffers.
- No in-combination effects have been identified.

Location of the scheme:

- The scheme extent is located within CNP, which will be notified of the proposed works.
- The A9 Essangal spans the River Tay SAC; an Appropriate Assessment as part of the HRA has been completed to assess the works impact on the designated features of the European site.
- The scheme will be confined within the existing carriageway boundary and as a result will not require any land take or alter any local land uses or habitats.
- There are no pedestrian facilities located within the scheme extents.
- 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.

Characteristics of potential impacts of the scheme:

- Containment measures of the working area will be in place to prevent debris or pollutants from entering the surrounding environment.
- 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 and nearby human and ecological receptors during the operational phase.
- As the works will be limited to the like-for-like replacement of the structural components, there is no change to the vulnerability of the road to the risk or severity of major accidents/disasters that would impact on the environment.

References of supporting documentation

BEAR Scotland. July 2024. A9 Essangal (670) Habitats Regulations Appraisal (HRA) Proforma.

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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