



**TRANSPORT
SCOTLAND**
CÒMHDHAIL ALBA

transport.gov.scot

Environmental Impact Assessment Record of Determination

A720 Sheriffhall to Gilmerton Westbound

Contents

Project Details	3
Description.....	3
Location	4
Description of local environment.....	5
Air quality	5
Cultural heritage	6
Landscape and visual effects	6
Biodiversity	8
Geology and soils	10
Material assets and waste	10
Noise and vibration	11
Population and human health	11
Road drainage and the water environment.....	12
Climate	12
Policies and plans	13
Description of main environmental impacts and proposed mitigation	14
Air quality	14
Landscape and visual effects	15
Biodiversity	15
Material assets and waste	18
Noise and vibration	19
Population and human health	21
Road drainage and the water environment.....	22
Climate	24
Vulnerability of the project to risks	24
Assessment cumulative effects.....	25
Assessments of the environmental effects	27
Statement of case in support of a Determination that a statutory EIA is not required.....	27
Annex A.....	29

Project Details

Description

BEAR Scotland has been commissioned by Transport Scotland to carry out resurfacing works on the A720 westbound carriageway. The works will consist of inlays to depths of 40mm, 100mm, and 200mm. The works will also involve the reinstatement of road markings and studs for a length of 1.61km (Approx. 1.29ha).

The construction activities for the resurfacing procedure are as follows:

- Set up traffic management (TM) and mark out site.
- Milling of existing bituminous material by road planer.
- Jackhammer and compressor for breaking up surfaces not accessible by planer (e.g. around gullies).
- Loader/excavator used to collect and move excess material.
- Sweeper to collect loose material and provide clean laying surface.
- Milled out/excavated materials all taken off site.
- Tack/bond coat laid.
- Base / binder material laid and compressed by paver (where required).
- Material compacted using a heavy roller.
- New bituminous surface course material laid by paver.
- Material compacted using a heavy roller.
- Mechanical sweeper to collect loose material.
- HGV for removal and replacement of material.
- Road markings and studs applied where necessary (in accordance with the Traffic Signs Manual, Chapter 5).
- Remove TM and open road.

The works are currently programmed to be completed within 2025/2026 financial year, with works expected to begin on the 11th of July 2025. Works are programmed to be completed over eight nights, excluding weekends (20:30 – 06:00). TM will involve eight night-time full road closures of the A720 westbound carriageway with a signed diversion in place. Traffic will use the following diversion:

- At Sheriffhall Roundabout, traffic will head south-west on A7.
- At the roundabout, traffic will take the 3rd exit onto Gilmerton Road/A772 and continue through one roundabout.

- At the roundabout, traffic will take the 3rd exit and stay on Gilmerton Road/A772 and continue through one roundabout.
- At the roundabout, traffic will take the 1st exit onto Gilmerton Station Road.
- At the roundabout, traffic will take the 2nd exit onto Lasswade Road.
- Traffic will then turn left onto Lang Loan.
- At Straiton Junction, traffic will then take the 2nd exit onto Straiton Road/A701.
- Traffic will then use the left lane to turn right to stay on Straiton Road/A701.
- Traffic will then turn left and rejoin the A720 via the slip road heading towards the Forth Road Bridge/A90/Glasgow/M8/Stirling/M9/Edinburgh West/Edinburgh North/Airport.

Location

The scheme lies on the A720 westbound (WB) carriageway northwest of Dalkeith (Figure 1), within the City of Edinburgh Council and is predominantly bordered by agricultural land.

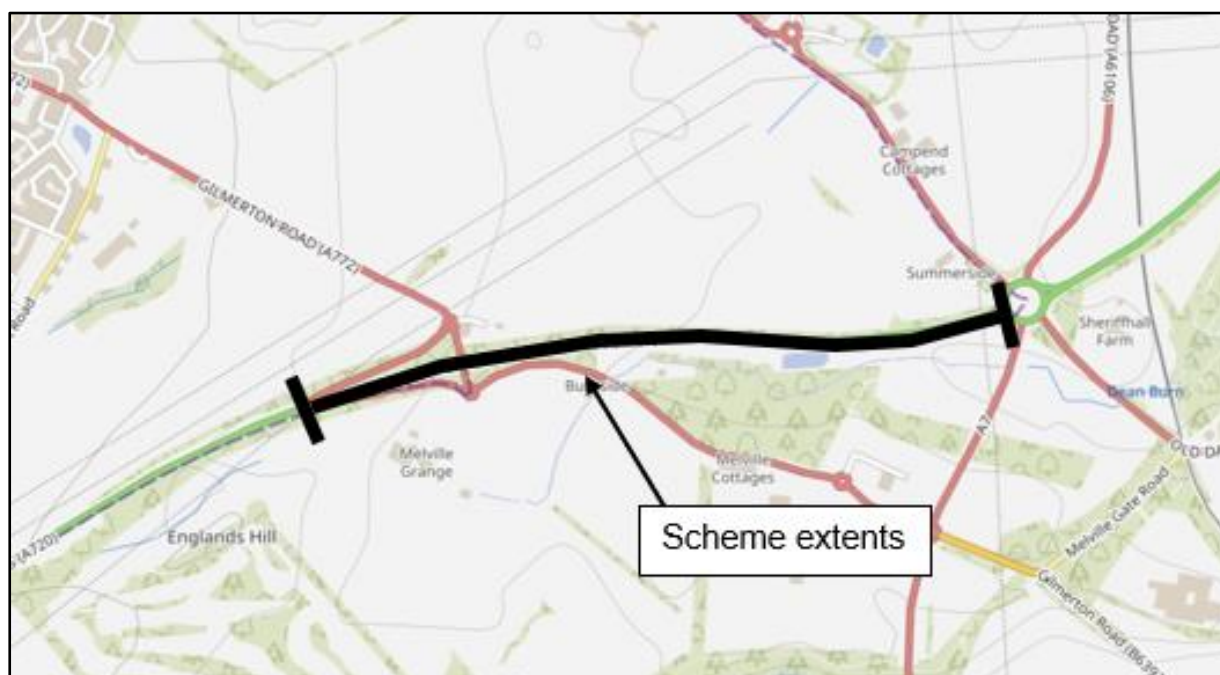


Figure 1: Extents of the works - Source: Asset Management Performance System (AMPS). © Europa Technologies Ltd. Contains Ordnance Survey data © Crown copyright and database right 2018.

Description of local environment

Air quality

Properties within 300m of the scheme – refer to ‘Population and Human Health’.

A search of the [Air Quality in Scotland](#) online mapping tool records that the air quality zones in the wider area record bandings in the ‘green zone’ (Low Index 1-3).

The scheme lies within the boundary of the City of Edinburgh Council, which has five active Air Quality Management Areas (AQMAs) within its administrative boundary. The nearest AQMA, ‘Edinburgh AQMA No.1 City Centre’, lies approx. 6.7km northwest of the scheme extents (at its nearest point) and has been declared for nitrogen dioxide (NO₂).

There are nine sites registered on the Scottish Pollutant Release Inventory ([SPRI](#)) for pollutant releases to air within the last 10 years, within 10km of the scheme:

- ‘Millerhill Recycling & Energy Recovery Centre’ – waste and waste-water management, declared for antimony, cadmium, carbon dioxide, chromium, copper, dioxins and furans, manganese, mercury, nickel, nitrogen oxides, and particulates (located approx. 2.7km northeast),
- ‘Millerhill Anaerobic Digestion Facility, Dalkeith’ – waste and waste-water management, declared for ammonia, carbon monoxide, and methane (located approx. 2.9km northeast),
- ‘East Lothian Eggs at Howden Farm’ – intensive livestock production and aquaculture, declared for ammonia (located approx. 3.4km southeast),
- ‘Interflex Limited, Mayfield Industrial Estate, Dalkeith’ – other activities, declared for non-methane volatile organic compounds (located approx. 4.3km southeast),
- ‘Oatslie Sandpit Landfill, Cleugh Road, Midlothian’ – waste and waste-water management, declared for carbon dioxide, chlorofluorocarbons, hydrochlorofluorocarbons, and methane (located approx. 6.4km southwest)
- ‘Edinburgh Sewage Treatment Works, Leith’ – waste and waste-water management, declared for ammonia, carbon dioxide, and methane (located approx. 7.9km northwest),
- ‘MacFarlan Smith Limited, Wheatfield Road, Edinburgh’ – chemical industry, declared for non-methane volatile organic compounds and toluene (located approx. 8.8km northwest),
- ‘North British Distribution, Wheatfield Road, Edinburgh’ – animal and vegetable products from the food and beverage sector, declared for carbon dioxide, hydrochlorofluorocarbons, hydrofluorocarbons, and non-methane volatile organic compounds (located approx. 8.8km northwest), and
- ‘Drummond Moor (no2) Landfill. Rosewell, Midlothian’ – waste and waste-water management, declared for chlorofluorocarbons, hydrochlorofluorocarbons, and methane (located approx. 9.2km southwest).

The baseline air quality within the scheme extents is primarily influenced by motor vehicles travelling along the A720 trunk road. Secondary sources are derived from vehicles travelling along nearby local network roads and day-to-day agricultural land management activities.

Cultural heritage

According to the [PastMap](#) and [Historic Environment Scotland](#) (HES) online mapping tool, there are five listed buildings located within 300m of the scheme extents. The nearest record pertains to 'Old Dalkeith Road Summerside Farmhouse, Stables and Cottage Range' (ID: LB14186), which lies approx. 120m north from the eastern end of the scheme extents.

One scheduled monument (SM) is located within 300m of the scheme extents. This record pertains to 'Melville Grange, Homestead and Pit Alignments 600m ESE of' (ID: SM4592), which lies approx. 240m south of the WB carriageway boundary.

No other designated cultural heritage assets are located within 300m of the scheme extents.

Of lesser cultural heritage value, approx. 34 undesignated cultural heritage assets (UCHAs) lie within 300m of the scheme extents. The nearest record pertains to 'Melville Grange' National Record of Historic Environment (NRHE) (ID: 67794), which lies approx. 5m north of scheme at the western extents.

Construction of the A720 carriageway is likely to have removed any archaeological remains that may have been present within the carriageway boundary. The potential for the presence of unknown archaeological remains in the study area has therefore been assessed to be low.

While one UCHA is located within close proximity to the scheme extents, the works will be restricted to the existing boundary and depth of the carriageway and will not be at risk of impacting this feature. Therefore, given this and the distance to the closest designated site there is no potential for impacts to cultural heritage features as a result of the proposed works and this topic has been scoped out of further environmental assessment.

Landscape and visual effects

The scheme is not situated within a [National Park](#) (NP) or [National Scenic Area](#) (NSA).

The Landscape Character Type (LCT) within the scheme extents is 'Lowland Rivers and Valleys - Lothians' (no. 270) ([Scottish Landscape Character Types](#)). The key characteristics of which are:

- Meandering rivers and tributary streams flowing northwards from the hills,

- Predominantly incised river valleys, enclosed and often narrow, though with landform ranging from sections of broader floodplain to very narrow gorges with distinctive rock exposures, although the lower north and South Esk are more open in character,
- Well wooded with extensive deciduous riparian woodland, and mature mixed policy woodlands associated with the numerous estates,
- Scrub and pasture with open areas of valley sides, giving way to arable land with shelterbelts on upper slopes and fringes,
- Large number of significant historic buildings, including vernacular cottages, 18th and 19th century farmsteads, churches (often with highly visible spires), industrial architecture, castles and towerhouses. Large country houses, often with extensive designed landscapes,
- Remnants of the coal mining industry are evident around the North and South Esk, where rolling farmland, settlement, transport infrastructure, light industry and business uses, also illustrate the diversity of land uses, and
- Views are generally contained by enclosed topography and dense woodland opening out on the farmed and settled upper slopes which give longer distance views to the Pentland Hills to the west. Many valleys are rural and tranquil, whilst quiet and secluded locations occur within all the valleys.

[Land use](#) within the study area is comprised of the following:

- Rectilinear farms and fields,
- Motorways and major roads,
- Restored agricultural land,
- Golf course,
- Managed woodland, and
- Industrial scale farming unit

The [national scale land capability for agriculture](#) classifies land surrounding the scheme as being:

- 'Class 2' – Land capable of producing a wide range of crops, and
- 'Class 3.1' – Land capable of producing consistently high yields of a narrow range of crops and/or moderate yields of a wider range. Short grass leys are common.

There are three areas of woodland registered on the [Native Woodland Survey of Scotland](#) database located within 300m of the scheme extents:

- Approx. 0.8ha of lowland mixed deciduous woodland, located directly alongside the WB carriageway at the western end of the scheme extents,

- Approx. 1.2ha of lowland mixed deciduous woodland, located directly alongside the WB carriageway at the western end of the scheme extents, and
- Approx. 0.6ha of lowland mixed deciduous woodland, located approx. 100m east from the eastern end of the scheme extents.

There are two areas of woodland registered on the [Ancient Woodland Inventory Scotland](#) database located within 300m of the scheme extents:

- Approx. 12.8ha of long established (of plantation origin) woodland, located approx. 70m south of the scheme extents, and
- Approx. 24.1ha of long established (of plantation origin) woodland, located approx. 230m southwest of the scheme extents.

In addition to the above, the following woodland is also located within 300m of the scheme extents:

- Approx. 2.25ha of broadleaved woodland, located approx. 200m north of the scheme at the eastern extents,
- Approx. 2.2ha of broadleaved woodland, located approx. 225m southwest of the scheme extents,
- Approx. 1.2ha of mixed mainly broadleaved woodland, located approx. 235m west of the scheme extents, and
- Approx. 1.8ha of broadleaved woodland, located approx. 190m north of the scheme at the western extents

The existing trunk road is a prominent linear landscape feature. The trunk road corridor, for example, has a distinct character shaped by fast-flowing traffic, road markings, safety barriers, signage, landscaping, etc. The scale of the trunk road detracts from the quality and character of the wider landscape.

Biodiversity

The [NatureScot Sitelink](#) online mapping tools identifies that the scheme is not situated within 2km of any European Sites designated for biodiversity features e.g. Special Areas of Conservation (SAC), Special Protection Areas (SPA), or Ramsar sites. However, the Firth of Forth SPA and Ramsar site lies approx. 5.2km south of the Forth of Forth SPA and Ramsar site and is therefore within the buffer zone for several of the qualifying features.

The Firth of Forth Site of Special Scientific Interest (SSSI) (component of the SPA and Ramsar site) lies approx. 5.2km north of the scheme extents.

There are no Special Sites of Scientific Interest (SSSIs), [Local Nature Conservation Sites](#) (LNCS) or Local Nature Reserves (LNRs) designated for biodiversity features within 300m of the scheme extents.

A search of the NBN online mapping tool records the following plant species as listed within the Network Management Contract (NMC) within 2km of the scheme extents (in the last 10-years):

Three invasive non-native species (INNS):

- Giant hogweed (*Heracleum mantegazzianum*),
- Himalayan balsam (*Impatiens glandulifera*), and
- Japanese knotweed (*Reynoutria japonica*).

Two injurious weeds:

- Common ragwort (*Senecio jacobaea*), and
- Creeping thistle (*Cirsium arvense*).

One invasive native perennial:

- Rosebay willowherb (*Chamaenerion angustifolium*).

The closest record pertains to common ragwort, which lies approx. 0.17km south of the scheme extents (recorded in 2018).

A search of the Asset Management Performance System (AMPS) online mapping tool records the following plant species within the verge of the A720 WB carriageway boundary within the scheme extents:

One INNS:

- Giant hogweed.

One injurious weed:

- Common ragwort.

One invasive native perennial:

- Rosebay willowherb.

The habitat immediately bordering the A720 WB carriageway consists primarily of large areas of agricultural land separated by field boundaries, steep embankments sloping towards the A720 trunk road, mature hedgerows and/or tree shelterbelts, natural roadside vegetation (e.g., immature trees, shrubs etc.) and made verges which undergo cyclic maintenance (e.g., grass-cutting, weed control, etc.). While there is high availability of roadside vegetation, the habitat immediately bordering the trunk road is assessed to be of reduced ecological value, due to the likelihood of trunk road disturbances from high volume, fast-flowing traffic and that the A720 trunk road limits the connectivity and continuity for species between their potential habitats on either side of the road.

Geology and soils

The A720 within the scheme extents is not located within a [Geological Conservation Review Site](#) (GCRS) and there are no [Local Geodiversity Sites](#) (LGS) located within 300m of the scheme extents.

The [National Soil Map of Scotland](#) online mapping tool records two generalised soil types within the scheme extents:

- Mineral gleys, and
- Brown Soils.

There are two major soil groups recorded within the scheme extents:

- Gleys, and
- Brown soils.

The [British Geological Survey](#) online mapping tool records the superficial geology within the scheme extents as:

- Glaciofluvial Ice Contact Deposits – Sand and Gravel, and
- Till, Devensian – Diamicton.

The bedrock geology within the scheme extents is recorded as:

- Scottish Lower Coal Measures Formation – Sedimentary Rock Cycles, Coal Measure Type.

There is no evidence of historical industrial processes or the storage of hazardous materials that could have given rise to significant land contamination within the scheme extents.

Factor has no constraints that are likely to be impacted by the proposed works and has therefore been scoped out of further environmental assessment.

Material assets and waste

The proposed works are required to replace the worn carriageway surface and reinstate road markings. Materials used will consist of:

- TS2010 10mm surface course class 1.
- TS2010 10mm surface course class 2.
- EME2 14mm aggregate binder.
- Tack/bond coat.
- Paving grade bitumen.
- Thermoplastic extrusion road markings.
- Embedded and surface mounted road studs.

As the value of the scheme is greater than £350,000, a Site Waste Management Plan (SWMP) is required for these works.

The 1.61km scheme involves removal of the surface course and localised areas of base and binder. In total, approx. 2554 tonnes of bituminous material (European Waste Catalogue Code: 17 03 02) will be removed from site, none of which is classified as hazardous material containing coal tar.

Noise and vibration

Receptors – refer to ‘Population and Human Health’.

Works are not located within a [Candidate Noise Management Area](#) (CNMA) or [Candidate Quiet Areas](#) (CQA).

The night-time modelled noise level ([LGNT](#)) within the scheme extents ranges between 70 and 75 decibels (dB), with levels dropping to between 60 and 65 dB at the nearest noise sensitive receptor (NSR) (residential property).

Baseline noise and vibration in the study area is mainly influenced by vehicles traveling along the A720 trunk road. Secondary sources are derived from vehicles travelling along nearby local network roads, day-to-day woodland and agricultural land management activities.

Population and human health

Several residential properties and one farm lie within 300m of the scheme extents. The nearest properties (residential, approx. four terraced properties) lie approx. 60m north of the scheme towards the western extents and are almost fully screened from the scheme extents (e.g., due to semi-mature/mature tree shelterbelts, hedgerows, and sloped embankments). The remaining properties have full screening from the scheme extents due to a combination of semi-mature/mature tree shelterbelts, mature hedgerows, minor sloped embankments, intervening topography and/or other properties.

There is one pedestrian footpath/crossing point and one cycle lane located at the eastern end of the scheme extents which crosses the A720 WB carriageway on approach to Sheriffhall Roundabout. There is street lighting present around and on approach to Sheriffhall Roundabout however, the rest of the scheme extents do not have street lighting.

The A720, within the scheme extents, is a dual carriageway with a speed limit of 70 mph applying throughout. The Annual Average Daily Traffic (AADT) flow is high (49,120 motor vehicles (ID: 80602, 2023 data)) ([Road Traffic Statistics](#)).

Road drainage and the water environment

The Scottish [Environment Protection Agency \(SEPA\) River Basin Management Plan](#) online mapping tool records no classified surface waterbodies within 300m of the scheme extents.

Three unclassified waterbodies lie within 300m of the scheme extents:

- 'Pond one', located approx. 20m south of the WB carriageway boundary,
- 'Dean Burn', located approx. 35m south of the WB carriageway boundary (at its nearest point),
- 'Park Burn', located approx. 135m southwest from the western end of the scheme extents, and

These waterbodies are considered to be too small (in terms of catchment area) to be classified as a main stem waterbody by SEPA under the (WFD).

A search of the [SEPA's Flood Map](#) online mapping tool records that the A720 WB carriageway within the scheme extents has a medium risk of surface water flooding each year.

A search of the [Scotland's Environment](#) (SE) online mapping tool determined that the trunk road, within the scheme extents, lies on the 'Dalkeith' groundwater, which has been classified as 'Poor'.

The scheme extents do not lie within a Nitrate Vulnerable Zone ([NVZ](#)).

Climate

The [Climate Change \(Scotland\) Act 2009](#) ('The Act'), and its subsequent amendment under the [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#), sets the framework for the Scottish Government to address climate change. The Act has an ambitious target to reach Net Zero greenhouse gas emissions by 2045, with any residual emissions balanced by removing carbon dioxide from the atmosphere. This is five years earlier than the rest of the UK due to the greater potential for carbon sequestration in Scotland.

The Act was amended to replace interim targets with carbon budgets. Carbon budgets are legally binding caps on greenhouse gas emissions in Scotland over five-year periods. In line with the Act, the Climate Change Committee (CCC) published advice on the level of Scotland's four carbon budgets, covering the period 2026 to 2045, recommending what the Scottish Government sets its carbon budgets at for annual average levels of emissions. These recommendations are based on an ambitious but credible route to Net Zero for Scotland by 2045.

Emissions reductions from surface transport are the largest contribution to meeting the first two carbon budgets. The pathway for surface transport emission reduction is

primarily driven by the uptake of electric vehicles, in addition to measures to enable a shift from car use to public transport and active travel, which all play a role in reducing emissions from fossil fuel cars. Ensuring efficiency of existing transport infrastructure and improving/providing new active travel facilities is therefore important to support these carbon reduction budgets.

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 the above noted legally binding target of net-zero by 2045. 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](#)).

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 ([Design Manual for Roads and Bridges \(DMRB\)](#)) and Transport Scotland's Environmental Impact Assessment Guidance ([Guidance - Environmental Impact Assessments for road projects](#)).

Description of main environmental impacts and proposed mitigation

Air quality

During the construction phase, activities undertaken on site could potentially have some minor localised and short-term air quality impacts in proximity to the works. The construction phase will, for example, require a range of ancillary plant, vehicles, and non-road mobile machinery (NRMM) which will contribute to local dust and air pollutants. The main sources are likely to be dust generated by cold milling in preparation of carriageway resurfacing, as well as exhaust emissions from ancillary plant and vehicles. As a result, there is potential for impacts to local air quality.

However, considering the nature and duration of the scheme, along with implementation of mitigation detailed below, the proposed works' impacts on local air quality levels during the construction period are assessed to be temporary, negligible adverse in magnitude.

Upon completion of the works, no residual air quality impacts are anticipated.

- A water-assisted dust sweeper will sweep the carriageway after dust-generating activities, and waste will be contained and removed from site as soon as is practicable.
- Materials that have a potential to produce dust will be removed from site as soon as possible, and vehicles that remove cold-milled material from site will have sheeted covers.
- Wherever possible, ancillary plant, vehicles, and non-road mobile machinery (NRMM) will be shut down.
- All ancillary plant, vehicles and NRMM will have been regularly maintained, paying attention to the integrity of exhaust systems.
- Ancillary plant, vehicles and NRMM will be switched off when stationary to prevent exhaust emissions (e.g., there will be no idling vehicles).
- Where practicable, if powered generators are required, the use of mains electricity ancillary plant will be considered in place of diesel or petrol alternatives.
- Cutting, grinding, and sawing equipment (if required) will be fitted or used in conjunction with suitable dust suppression techniques e.g., local exhaust ventilation system that fits directly onto tools.
- Regular monitoring (e.g., by engineer or Clerk of Works) will take place when activities that have the potential to impact local air quality are occurring. In the unlikely event that unacceptable dust or exhaust emissions are emanating

from the site, the operation will, where practicable, be modified and re-checked to verify that the corrective action has been effective. Actions to be considered include: (a) minimizing cutting and grinding on-site, (b) reducing the operating hours, (c) changing the method of working, etc.

Landscape and visual effects

During construction there will be a short-term impact on the landscape character and visual amenity of the local area due to the presence of construction plant, vehicles, and TM. However, all construction is restricted to areas of made/engineered ground on the A720 WB carriageway, and works are programmed to be undertaken at night (eight nights). As such, the visual impact of the works will be somewhat reduced.

Considering the nature, duration, size, and scale of the scheme, and with implementation of mitigation detailed below, impacts on landscape and visual effects are assessed as temporary, negligible adverse in magnitude.

Upon completion of the works, no residual impacts on landscape and visual effects are anticipated e.g., when complete, the visual appearance will remain largely unaffected, with a renewed road surface on the A720 being the only discernible change.

Landscape and visual effects mitigation measures:

- The site will be monitored regularly for signs of litter and other potential contaminants, and litter will be removed before and after works take place.
- The site will be left clean and tidy following construction.
- Where possible, construction vehicles will not be left in places where soil or vegetation can be damaged. If damage to road verge occurs this must be lightly cultivated or graded (upon completion of the works) to allow natural recolonization by local species and promote integration with existing landscape character.

Biodiversity

While the scheme extents fall within the buffer zones of a small number of qualifying features of the Firth of Forth SPA and Ramsar site all works will be restricted to the existing A720 westbound carriageway surface and are separated from the SPA and Ramsar site by densely populated residential areas, industrial/commercial areas, grassland, arable land, and woodlands. Furthermore, standard BEAR working practices (e.g., adherence to SEPA Guidance for Pollution Prevention (GPP) and The Water Environment (Controlled Activities) Scotland Regs 2011 (CAR)) will be implemented and ensure that there will be no potential pollution impacts to habitat

which supports the qualifying features of the SPA or Ramsar Site. As this working practice is standard and not considered to be an additional control measure or mitigation, the Habitat Regulations Appraisal has concluded that there will be no likely significant effects on the SPA or Ramsar Site as a result of the proposed resurfacing works.

A temporary short-term increase in noise levels may cause disturbance to local wildlife if present in the vicinity of the works. The works will, for example, require a range of ancillary plant, vehicles and NRMM which will emit noise and create potential disturbance. The works will also require delivery of materials and the presence of personnel to facilitate the improvements to the road surface. However, the number of construction vehicles and construction operatives required onsite is low given the scale and scope of works. In addition, any species in the area are likely to be accustomed to noise and visual disturbance pertaining to vehicle movements on the A720. The potential for significant species disturbance within the area of construction is therefore somewhat diminished.

Giant hogweed, an INNS, has been identified along the verge of A720 WB carriageway boundary within the scheme extents. While all works will be restricted to the existing A720 WB carriageway boundary, there is still a risk of spreading the INNS giant hogweed during the works. However, providing mitigation measures detailed below are adhered to on site, the risk of spreading INNS giant hogweed is considered to be negligible.

Of lesser note, common ragwort, an injurious weed, and rosebay willowherb, an invasive native perennial, have been recorded within the WB verge within the scheme extents. However, given the minor nature of the works, and the restriction to the existing WB carriageway boundary, the risk of impacting this species will be somewhat reduced. Nevertheless, precautionary mitigation detailed below will further reduce this risk.

Considering the nature, duration, size, and scale of the scheme, and with implementation of mitigation detailed above, the proposed works impacts on biodiversity throughout the construction period are therefore assessed to be temporary, minor adverse in magnitude.

Upon completion of the works, no residual impacts are anticipated in relation to biodiversity.

Biodiversity mitigation measures:

- Where possible, artificial lighting used during night works will be sufficiently screened and aligned to ensure that there is no direct illumination of neighbouring habitat (e.g., locations adjacent to tree shelterbelt, grassland etc.).

- All site operatives will be made aware of the location and extent of INNS giant hogweed within the WB carriageway verge on site. No entry into the verge by site operatives, storage of equipment, material or vehicles within the A720 WB carriageway verge is permitted at the locations of giant hogweed.
- Giant hogweed, an INNS, common ragwort, an injurious weed, and rosebay willowherb, an invasive native perennial, have been recorded along the verge within the scheme extents. Toolbox Talk TTN-009 'Working with Injurious Weeds & Invasive Plants' will therefore be briefed prior to works commencing. Site personnel will remain vigilant for the presence of any other potentially unrecorded instances of invasive or injurious species in road verges throughout the works period.
- Given the records of protected species within 2km of the scheme extents, Toolbox Talk TTN-139 'Protected Species' will be briefed to all site operatives prior to the commencement of works.
- The works are not permitted to disturb or destroy any active birds nests. If an active birds nest is identified onsite that will be impacted by works, BEAR Scotland's Environmental Team should be contacted.
- All site workers will have received adequate training relevant to their role prior to working on the site, including specific environmental inductions and 'toolbox talks' as required.
- Site personnel will remain vigilant for protected species and will not approach or touch any animals seen on site. Any sightings of protected species will be reported to BEARs Environmental Team. Should a protected species be encountered or move within 50m of the active works (including compounds), works will be temporarily halted until the animal(s) move at least 50m away from the construction site, or until BEAR's Environmental Team can provide advice.
- The Contractor will employ 'soft start' techniques for all noisy activity to avoid sudden and unexpected disturbance during works. Each time the activity is started up after a period of inactivity, the noise levels will be gradually increased over a period of 30 minutes to permit animals (including birds) to move away from the disturbance.
- All equipment stored onsite, if necessary, will be checked at the start of each shift to ensure no animals are present. Any storage containers/plant within the compound will also be secured overnight to prevent exploration by mammal species. Any areas where an animal could become trapped (e.g., storage containers) will also be covered at the end of each working day.
- People, ancillary plant, vehicles, NRMM and materials will be restricted to areas of made/engineered ground (as much as is reasonably practicable). If during works unforeseen access to the surrounding environment is required, works will cease in this area and BEAR Scotland's Environmental Team will be contacted to allow consideration of potential environmental effects.
- BEAR Scotland's Environmental Team will be contacted to allow consideration of potential environmental effects if:
 - unforeseen site clearance is required,

- unplanned works must be undertaken out with the carriageway boundary,
 - there is any deviation from the agreed plan, programme and/or method of working,
 - nesting birds are found onsite.
- BEAR Scotland's Control Room will be contacted if there is a pollution incident.

Material assets and waste

Minimising impacts arising from construction materials are focussed upon making the most efficient use of materials onsite to reduce the need for imported primary materials and minimise the creation and disposal of waste through (i) reduction, (ii) re-use, and (iii) recycling. Potential impacts have been assessed for both the construction and operational phases of this scheme. It is anticipated that most material impacts are likely to arise during construction, though long-term residual impacts could occur post construction during the operational phase e.g., during the disposal of materials arising from routine maintenance operations.

However, the detailed design will reduce the requirements for primary materials e.g., the carriageway surfacing, and subbase will be carefully considered to minimise the requirements for importing primary material. Materials will also be derived from recycled, secondary, or re-used origin as far as practicable within the design specifications to reduce natural resource depletion. Specifying TS2010 surface course also allows a wider array of aggregate sources to be considered when compared to typical stone mastic asphalt (SMA). As a result, the use of TS2010 should reduce the usage of imported aggregates and increase the use of a wider range of sustainable aggregate sources. The design life for the TS2010 surfacing is also estimated to be 20 years. The enhanced durability of TS2010 therefore reduces reoccurring routine maintenance and associated levels of traffic disruption to this section of road over the period.

Considering the nature, duration, size, and scale of the scheme, and with implementation of the mitigation detailed below, the proposed works impacts on material assets and waste throughout the construction period are therefore assessed to be temporary, negligible adverse in magnitude. Upon completion of the works, no residual impacts are anticipated on materials or waste.

Material assets and waste mitigation measures:

- A SWMP will be completed by the Designer and Contractor as required. The SWMP will provide details of the following:
 - The quantity and type of waste that will be produced.

- How waste will be minimised, reused, recycled, recovered, or otherwise diverted from landfill.
- How materials that cannot be reused, recycled, or recovered will be removed from site and consigned, transported and disposed of in full accordance with all relevant legislation.
- Good materials management methods (e.g., 'just-in-time' delivery) will be implemented wherever possible.
- The Contractor will comply with all 'Duty of Care' requirements, ensuring that any surplus materials or waste are stored, transported, treated, used, and disposed of safely without endangering human health or harming the environment. Waste transfer notes and/or waste exemption certificates will also be completed and retained.
- The Contractor is responsible for the reuse / disposal of non-hazardous 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 (exemption number: WML/XS/2010572), the rules of which will be complied with.
- Designated areas will be identified within which all materials and personnel, including construction compounds, where necessary, will be contained to limit environmental disturbance during construction works. This will include a designated area (if required) for segregation and reuse of waste materials.
- The selection of areas for materials stockpiling will avoid sensitive locations such as road drainage. Stockpiled materials with leachate potential, for example, will be stored away from road drainage to prevent cross-contamination with other materials, wastes, or groundwater.
- Materials will be stored with the appropriate security to prevent loss, theft, or vandalism.
- All temporary road signs and traffic cones will be removed from site on completion of works.
- Wastewater from welfare facilities (if required) will be subject to effluent treatment followed by tanker removal.
- If hazardous substances are used onsite, each substance will be subject to assessment under the Control of Substances Hazardous to Health (COSHH) Regulations 2002. Hazardous substances will also be clearly labelled, and disposed of, in line with relevant waste regulations. Special waste will also not be mixed with general waste and/or other recyclables.

Noise and vibration

Activities undertaken on site could potentially have some localised and short-term noise impacts in proximity to the works. The road works will, for example, require a range of ancillary plant, vehicles and NRMM for cold milling in preparation for

carriageway resurfacing. Noise will also be generated by using breakers (jackhammers), chipping hammers, use of rollers, etc. As a result, there is potential for noise and vibration effects to residential properties within the local area, the closest of which lies approx. 60m north of the A720 WB carriageway within the scheme extents.

However, the works are not located within a CNMA or CQA, and while they will be completed over eight nights, the aim will be to complete the noisiest works by 23:00. In addition, the proximity of road space suggests that residents have a degree of tolerance to noise and disturbance.

The road surface is in a poor condition, with a series of defects. Replacing the life-expired surface course with TS2010 road surfacing affords the benefits of a reduction in mid-to-high frequency traffic noise and a reduction in the ground vibrations. As a result, upon completion of the work, noise associated with the movement of vehicles on the A720 trunk road should decrease post construction.

Considering the likely sources of noise and vibration, with the nature, duration, size, and scale of the scheme, and with implementation of the mitigation detailed below, it is unlikely that noise and vibration associated with the works will lead to significant impacts, disruption and/or complaints. The proposed scheme is therefore anticipated to result in temporary, minor adverse noise impacts.

- The local authority environmental health department will be notified of nighttime working by BEAR Scotland's design engineer.
- 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.
- If unacceptable noise is emanating from the site the operation will, where possible, be modified and re-checked to verify that the corrective action has been effective. Actions to be considered include (a) minimizing cutting and grinding on-site, (b) reducing the operating hours, (c) repositioning equipment, (d) changing the method of working etc. Corrective actions will be actioned through the non-conformance reporting procedure, which ensures a root-cause analysis is carried out on each incident. The non-conformance procedure also ensures that appropriate corrective and preventative action measures are agreed and implemented in a timely fashion with all parties, and are recorded and actioned through to closeout, and fully auditable and traceable.
- Ancillary plant, vehicles and NRMM with directional noise characteristics will (where practical) be shut down in intervening periods between site operations.

- The use of paving breakers (jackhammers), chipping hammers, etc. will be avoided (except where there is an overriding justification), and if used will be fitted with mufflers or silencers of the type recommended by the manufacturer.
- Drop heights from vehicles and NRMM will be kept to a minimum to minimise noise when unloading.
- All ancillary plant, vehicles and NRMM used onsite will have been regularly maintained, paying attention to the integrity of silencers and acoustic enclosures.
- All compressors will be 'sound-reduced' models fitted with properly lined and sealed acoustic covers which will be kept closed when in use.
- HGV, site vehicles and NRMM will be switched to the minimum setting required by HSE and, where possible, will utilise 'broadband non-tonal' or 'directional sound reversing' alarms. Speed limits will also be reduced through the works.

Population and human health

During construction, activities undertaken on site have the potential to have temporary adverse impacts on local residents and road users. While TM will be in place for eight nights, it will be restricted to night-time hours when traffic flows will be at a minimum, as such no congestion issues are expected during the proposed construction hours.

In addition, one pedestrian footpath/crossing point and one cycle lane crosses the A720 WB carriageway at the eastern end of the scheme extents on approach to Sheriffhall roundabout within the area of scheduled road closure. As such, there is potential for impacts to non-motorised users (NMUs). However, alternative footpaths are present at the roundabout and with the restriction of the works to night-time working hours when pedestrian use of footpaths, crossing points and cycle lanes will be significantly reduced, no impacts to NMUs are anticipated during the proposed working hours.

Considering the nature, duration, size, and scale of the scheme, and with implementation of the mitigation described above, impacts on population and human health are assessed as temporary, minor adverse in magnitude.

Upon completion of the works, there will be a positive impact in relation to population and human health due to the improvement of usability and safety provided by the new carriageway surface.

Population and human health mitigation measures:

- Where appropriate, a communication strategy (e.g., social media, consultation with local authority and other stakeholders, letter drop (for night-time works),

etc.) will be initiated to keep local residents and/or businesses informed of the proposed working schedule, particularly the times and durations of noisy construction activities. The communication strategy will also provide a 24-hour contact number for the BEAR Scotland Control Room.

- Advanced signage will be strategically placed on the trunk road to notify stakeholders of the road closure and diversion at least seven days in advance.
- 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.

Road drainage and the water environment

During resurfacing works, there is potential for temporary adverse impacts on the water environment. Potential changes in water quality e.g., from pollution events (either by accidental spillage of sediments, particulate matter, chemicals, fuels or by mobilisation of these in surface water caused by rain) during works have the potential to have a direct or indirect effect on surrounding waterbodies.

However, there are no classified or unclassified waterbodies spanned by, culverted beneath, or which share direct connectivity with the scheme extents. In addition, given the restriction of the works to the existing A720 WB carriageway boundary, there is limited potential for direct impacts to nearby waterbodies, the closest of which, 'Pond one' and 'Dean Burn', lie approx. 20m and 35m south of the scheme extents, respectively. Furthermore, the potential for a direct pollution incident within a waterbody is also unlikely e.g., experience gained from BEAR maintenance schemes elsewhere on the network has shown that where standard best working practice is adopted (e.g., adherence to SEPA GPPs or PPGs, utilisation of drain covers or similar, etc.), water quality is protected.

Considering the nature, duration, size, and scale of the scheme, and with implementation of the mitigation detailed below, the proposed works impacts on the road drainage and water environment are assessed as temporary, negligible adverse in magnitude.

Upon completion of the resurfacing works, no residual impacts are anticipated in relation to the road drainage and water environment.

Road drainage and the water environment mitigation measures:

- Site operatives will be made aware of the proximity of 'Pond one' and 'Dean Burn'.

- No work has been identified that would require entering a waterbody. If such a need were identified onsite, BEAR Scotland's Environmental Team will be contacted (before works commence) to allow consideration of potential environmental effects.
- The abstraction or transfers of water from, discharges to, or the washing of tools in surface waterbodies identified is not permitted.
- The Contractor will implement measures to minimise the risk of sediment or accidental spillages entering the road drainage system e.g., prior to works commencing any roadside gullies within 10m of work activities will be bunded (e.g., utilisation of drain covers or similar) to ensure full segregation of the works from the road drainage system. The Contractor will inspect bunds periodically to ensure that they have not been removed, damaged, or interfered with and they will be cleaned of silt and debris as necessary. If it is identified that bunds are not up to standard, the works will not commence until they have been reinstated to the condition, they were originally in.
- All site personnel will be made aware of site spillage response procedures and in the event of a spill, all works associated with the spill will stop, and the incident reported to the Site Supervisor. Small spills that did not leave the site boundary and are cleaned up without material environmental harm or residual environmental impact would most likely not be required to be notified to SEPA or other authorities. However, all such incidents will be recorded and reported to BEAR Scotland's Environmental Team. In the event of a 'serious incident', SEPA will be notified without delay. Such notification will include: (i) the time and duration of the incident, (ii) a description of the cause of the incident, (iii) any effect on the environment as a result of the incident, and (iv) any measures taken to minimise or mitigate the effect and prevent a recurrence.
- All waste, vehicles, ancillary plant, NRMM and fuels will be stored in the compound (s) or laydown area and will be secured and located, if space is available, at least 10m from drainage entry points, in order to comply with GPP 5 'works and maintenance in or near water'. Refuelling will only be undertaken at designated refuelling areas (e.g., on hardstanding, with spill kits available, and >10m from drainage entry points, where practicable). Spill kits will also be available within all site vehicles and spill kits will be replenished onsite when required. Only designated trained and competent operatives will be authorised to refuel plant. Generators, and other ancillary plant and NRMM, where there is a risk of leakage of oil or fuel, will have internal bunding or must have a secondary containment system placed beneath them that meets 110% capacity requirements. Containment systems will also be emptied regularly. All waste, vehicles, ancillary plant, NRMM and fuels will also be stored in a manner that ensures they are protected from damage by collision or extremes of weather.
- Appropriate measures will be implemented during resurfacing operations to limit the potential for wastes (i.e. road planings) and materials (i.e. new asphalt) to enter any gullies present on site. On completion of resurfacing operations, any gullies present on site will be visually checked to ensure they have not become blocked as a result of the scheme.

- Regular visual pollution inspections of the designated laydown area and work site (particularly near road drainage entry points) will be conducted (e.g., site walkover by engineer or Site Supervisor), especially during periods of heavy rain.
- All vehicles and NRMM onsite will have been regularly maintained, paying attention to the integrity of oil tanks, coolant systems, gaskets etc. A checklist will be present to make sure that the checks have been carried out.

Climate

BEAR Scotland, working on behalf of Transport Scotland, undertake carbon monitoring of major projects and operational activities. Emissions from activities are recorded using Transport Scotland's Carbon Management System. BEAR Scotland also undertakes resource efficiency activities to manage and reduce emissions contributing to climate change. The works will also extend the maintenance intervals required for future works. In doing so, the service life of the trunk road is also extended.

During works there is potential for impacts as a result of the emission of greenhouse gases through the use of equipment, vehicles, and NRMM, material use and production, and transportation of material/waste. However, considering the nature, duration, size and scale of the scheme, and the mitigation detailed below, the risk of significant impacts to climate are considered to be negligible and adverse in magnitude.

Upon completion of the proposed scheme no residual impacts are anticipated on the climate.

Climate mitigation measures:

- Local contractors and suppliers will be used as far as practicable to reduce fuel use and greenhouse gases emitted as part of the works.
- BEAR Scotland will adhere to its Carbon Management Policy.
- Where possible, waste will be removed to local waste management facilities.

Vulnerability of the project to risks

There will be no change to the likelihood of flooding on the A720 within the scheme extents upon completion of the works.

Works are restricted to areas of made ground on the A720 WB carriageway surface, with access to the scheme gained via the A720 mainline. TM will employ eight nighttime full road closures between Sheriffhall Roundabout and the Gilmerton WB on slip with a signed diversion in place. As such, the proposed works' impacts on road traffic accidents are assessed to be of negligible magnitude.

A Site Environmental Management Plan (SEMP) will be produced by BEAR Scotland which sets out a framework to reduce the risk of adverse impacts from construction activities on sensitive environmental receptors. The Contractor will comply with all conditions of the SEMP during works and may be subject to audit throughout the contract.

Considering the above, the vulnerability of the project to of major accidents and disasters is considered to be low.

Assessment 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 Scottish Road Works Commissioner's website ([map search](#)) has identified that no other road works are currently ongoing, or noted as being planned, on the A720 trunk road or surrounding roads in proximity to the scheme which will be undertaken at the same time.

In addition, a search using the [City of Edinburgh Council 'Simple Search'](#) and [Midlothian Council Planning Portal](#) identified three planning applications within 300m of the scheme extents in the last two years (Table 1).

Table 1. Planning applications within two years.

Reference	Description of works	Status	Distance from works
25/00175/PNCOM	Erection of 20m high telecommunication mast, transmission dishes and antennae and ancillary equipment	Awaiting decision	Approx. 90m southeast
24/04605/FUL	Proposed side extension with internal alterations.	Granted	Approx. 165m north
24/00046/ADV	Display of four non-illuminated roundabout sponsorship signs	Granted with conditions	Approx. 290m south

While it is not possible to gain an understanding on the timing or duration of the above planning applications, it is considered that even in the event that the above planning applications were being progressed at the same time as the BEAR Scotland resurfacing scheme, given the small-scale nature of the planning application, no in-combination effects are anticipated.

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.

Given the distance separating the resurfacing works from the Firth of Forth SPA and Ramsar Site, a HRA proforma was undertaken to assess for any potential effects that the works may have on the SPA and Ramsar Site. The HRA concluded that the proposed resurfacing works will not result in any likely significant effects on any of the qualifying features of the SPA and Ramsar Site.

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) exceed 1 hectare in area.

The project has been subject to screening using the Annex III criteria to determine whether a formal Environmental Impact Assessment 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:

- Works are restricted to like-for-like replacement of worn/damaged road surface, with all works restricted to made ground on the A720 WB carriageway surface.
- Works are not expected to result in significant disturbance to protected species that may be present in the wider area surrounding the scheme extents.
- The risk of major accidents or disasters is considered to be low.
- By removing the carriageway defects, this will provide this section of the A720 WB carriageway with another life cycle, and significantly improve the ride quality, which will result in safer conditions for road users.

Location of the scheme:

- The scheme does not lie within any sites of historical, cultural, or archaeological significance.
- The scheme is not located within any designated landscape areas.
- Land use will not change as a result of the works.
- The works do not require any private land acquisition.
- The scheme is not located within a densely populated area.

Characteristics of potential impacts of the scheme:

- The waste hierarchy will be followed to reduce waste to landfill.
- Works are programmed to take eight nights to complete (excluding Saturday and Sunday), with the aim being to complete the noisiest works by 23:00.
- With good practice pollution prevention measures implemented onsite, there is a negligible risk of a pollution event e.g., compliance with the SEMP.

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.



**TRANSPORT
SCOTLAND**

CÒMHDHAIL ALBA

© Crown copyright 2025

You may re-use this information (excluding logos and images) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence> or e-mail: psi@nationalarchives.gsi.gov.uk

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Further copies of this document are available, on request, in audio and visual formats and in community languages. Any enquiries regarding this document / publication should be sent to us at info@transport.gov.scot

This document is also available on the Transport Scotland website: www.transport.gov.scot

Published by Transport Scotland, July 2025

Follow us:



transcotland



@transcotland

transport.gov.scot



Scottish Government
Riaghaltas na h-Alba
gov.scot