

**Record of Determination A78 Collenan Road to Meadowhead Roundabout Northbound**

**EC DIRECTIVE 2011/92/EU (as amended)**

**ROADS (SCOTLAND) ACT 1984 (Environmental Impact Assessment)  
Regulations 2017 (as amended)**

**RECORD OF DETERMINATION**

**Name of Project:**

A78 Collenan Road to Meadowhead  
Roundabout Northbound

**Location:**

The scheme is located on a section of the A78 carriageway north of Barassie, falling within both South Ayrshire and North Ayrshire. The works have the following National Grid References (NGR):

- Scheme start: NS 34422 32475
- Scheme end: NS 33669 34014

The length of the scheme is approximately 1.7km, with an area of approximately 1.7ha.

**Description of Project:**

The northbound A78 carriageway at this location features large areas of fretted surface course, which indicates that the surface course has reached the end of its serviceable life. There are also localised areas of longitudinal and transverse cracking present throughout the length of the scheme.

As such, works are required to address the surface course issues present within this stretch of carriageway, with deeper treatment at areas of cracking.

Works will involve surface course treatment using TS2010, with exact treatment depths yet to be determined. Works will involve the following construction activities:

- Milling of existing bituminous material by road planer;
- Additional bituminous material removed by jack hammer where not accessible by planer;
- Road sweeper to collect any loose material;
- HGV for removal and replacement of material;
- Tack/bond coat laid;
- New bituminous material laid by a paver;
- Material compacted using a heavy roller;

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- Road markings will be applied where necessary.

The package of works is set to take place in May 2021, commencing Monday 17th May (20:00) until Friday 21st May (06:00), and will involve both daytime and night-time working.

South Ayrshire and North Ayrshire Council's Environmental Health Team have been contacted regarding the required works.

Traffic management (TM) will involve a combination of single lane closures and full northbound (NB) carriageway closures, facilitated by contraflow. The A78 carriageway will remain open at all times.

Please see Appendix 1 for a Location Plan and Scheme Extents drawing.

### Description of Local Environment:

The following baseline descriptions have been numbered to follow the appropriate DMRB chapters for environmental assessment and do not reflect a ranking of sensitivity.

#### 1. Population and Human Health

The works area is located along a semi-rural stretch of the A78 carriageway, falling within both North and South Ayrshire. The residential area of Barassie is located west of the carriageway, and industrial areas are located to east, including Hillhouse quarry and Auchengate sawmill.

The A78 carriageway is the main connecting route between Greenock and Prestwick. The vehicle count per day in 2020 at this location is 8,114, with a heavy goods vehicle (HGV) average of 6.75%. Baseline noise level is likely to be primarily influenced by vehicle traffic from the carriageway, with secondary sources including activity from nearby agricultural, industrial, and residential activities.

Several residential properties are located in close proximity to the carriageway, with the closest (Highfield) located approx. 40m west at the northern scheme extents.

No non-motorised user (NMU) provisions are present on the A78 carriageway within the scheme extents<sup>1</sup>. Core Path SA7<sup>2</sup> crosses the A78 carriageway via an overbridge.

Two laybys exist on the northbound (NB) carriageway within the scheme extents, at both the northern and southern scheme extents. An off slip exists within the scheme extents, leading to the A759.

The scheme does not fall within a Candidate Noise Management Area (CNMA)<sup>3</sup> as defined by the Transportation Noise Action Plan, Road Maps.

#### 2. Biodiversity

The scheme is located along the A78 carriageway within a semi-rural area east of Barassie, surrounded predominantly by agricultural land. Kilmarnock Golf Course and Irvine Bay coastal water body are located west.

1 <https://www.sustrans.org.uk/national-cycle-network> (Accessed 30/03/2021)

2 <https://south-ayrshire.maps.arcgis.com/apps/Style/index.html?appid=271d61f79ccf47adbe94e507edb4afa4> (Accessed 30/03/2021)

3 <https://consult.gov.scot/transport-scotland/transportation-noise-action-plan-2019-2023/> (Accessed 30/03/2021)

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### Description of Local Environment:

A desktop study using Nature Scot Sitelink Online Interactive Map<sup>4</sup> has not highlighted any national or European designated sites within proximity of the works location.

The Amey Animal Roadkill Database (2000 – 2021) has not highlighted any protected species roadkill within the scheme extents.

Amey's Invasive Non-native Species Database (INNS) has not highlighted any INNS growth within proximity of the scheme extents.

#### Field Survey

Surrounding environment consists of predominantly open, low-lying agricultural land, with thin vegetated strips located intermittently along the carriageway. Due to lack of favourable environment within close proximity to the scheme, presence of protected species shelter for protected species has been ruled out. As such, a desktop assessment has been deemed sufficient, and a site survey has been ruled out.

### 3. Land

The A78 northbound trunk road footprint within the scheme extents consists of two lanes, in addition to an off-slip and two lay-bys.

Road verges are vegetated with low lying grass and thin strips of trees.

### 4. Soil

The National Soil Map of Scotland has identified the local soil type as a combination of brown earths and non-calcareous gleys<sup>5</sup>.

The scheme is not located within, or within proximity to, any Local Geodiversity Sites (formerly known as RIGS)<sup>6</sup> or geologically designated SSSIs<sup>7</sup>.

The Geology for this section of the A78 comprises the following<sup>8</sup>:

- Bedrock geology:
  - Troon volcanic member - Basalt, olivine-macrophyr. Igneous bedrock formed approximately 319 to 329 million years ago in the Carboniferous Period. Local environment previously dominated by eruptions of silica-poor magma.
  - Scottish Lower Coal Measures Formation - Sedimentary rock cycles, coal measure type. Sedimentary bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period. Local environment previously dominated by swamps, estuaries and deltas.
- Superficial deposits:
  - Till, Devensian - Diamicton. superficial deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (U).

<sup>4</sup> <https://sitelink.nature.scot/home> (Accessed 30/03/2021)

<sup>5</sup> [https://map.environment.gov.scot/Soil\\_maps/?layer=1](https://map.environment.gov.scot/Soil_maps/?layer=1) (Accessed 30/03/2021)

<sup>6</sup> <https://www.google.com/maps/d/viewer?mid=1HfclRWclTRxXUZWNARManl-PUhE&ll=57.74680670722851%2C-5.313263556249922&z=6> (Accessed 30/03/2021)

<sup>7</sup> <https://sitelink.nature.scot/home> (Accessed 30/03/2021)

<sup>8</sup> <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (Accessed 30/03/2021)

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<b>Description of Local Environment:</b>
<ul style="list-style-type: none"> <li>▪ Blown Sand - Sand. Superficial deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by wind blown deposits (U).</li> <li>▪ Glaciofluvial Ice Contact Deposits - Gravel, sand and silt. Superficial deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (UGF).</li> <li>▪ Raised marine deposits, Devensian - Clay, silt, sand and gravel. Superficial deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by shallow seas (U).</li> <li>▪ Peat - Peat. Superficial deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by organic accumulations (U).</li> </ul>
<p>5. Water</p> <p>Four minor watercourses/ drains (unclassified by SEPA) flow below the A78 carriageway within the scheme extents, all likely outflowing into Irvine Bay coastal water body, located approx. 1.2km west. Scottish Environmental Protection Agency (SEPA) has classified this coastal water body with an overall status of 'Moderate', with an overall ecology status of 'Moderate'<sup>9</sup>.</p> <p>The Indicative River &amp; Coastal Flood Map<sup>10</sup> by SEPA has highlighted small areas of the A78 carriageway within the scheme extents as being at risk of surface water flooding, along the course of the issues.</p> <p>Road drainage is provided by a combination of top entry gullies and filter drain.</p>
<p>6. Air</p> <p>The scheme is located along a semi-rural stretch of the A78 carriageway, surrounded predominantly by agricultural land. The residential area of Barassie is located west of the carriageway, and industrial areas are located to east.</p> <p>The A78 carriageway is the main route connecting Greenock to Prestwick. The vehicle count per day in 2020 at this location is 8,114, with a heavy goods vehicle (HGV) average of 6.75%.</p> <p>As such, air quality is predominantly affected by the daily use of the carriageway by road vehicle users, with secondary sources including a nearby agricultural, industrial, and residential activities.</p> <p>North Ayrshire and South Ayrshire Councils have not declared any Air Quality Management Areas (AQMA)<sup>11</sup>.</p>
<p>7. Climate</p> <p>The Climate Change (Scotland) Act sets out the target and vision set by the Scottish Government for tackling and responding to climate change. The Act includes a target of reducing CO2 emissions by 80% before 2050 (from the baseline year 1990).</p> <p>Amey, working on behalf of Transport Scotland, undertake carbon monitoring. Emissions from our activities are recorded using Transport Scotland's Carbon Management System.</p>

<sup>9</sup> <https://www.sepa.org.uk/data-visualisation/water-classification-hub/> (Accessed 30/03/2021)

<sup>10</sup> <http://map.sepa.org.uk/floodmap/map.htm> (Accessed 30/03/2021)

<sup>11</sup> <http://www.scottishairquality.scot/lqgm/aqma?id=378> (Accessed 30/03/2021)

**Description of Local Environment:**

To support the journey towards carbon neutral and zero waste, Amey include potential opportunities for enhancement utilising circular economy principals within assessment of material assets.

8. Material Assets

Key Materials Required for Activities

Activity	Material Required	Origin/ Content
Site Construction	<ul style="list-style-type: none"> <li>• Road surfacing (aggregate and binder) <ul style="list-style-type: none"> <li>○ TS2010 Surface Course</li> </ul> </li> <li>• Road paint</li> <li>• Road studs</li> </ul>	<p>A proportion of reclaimed asphalt pavement (RAP) is used in asphalt production. Typical RAP values for base and binder are 10% - 15%.</p> <p>TS2010 Surface Course 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 will reduce the usage of imported aggregates and increase the use of a wider range of sustainable aggregate sources<sup>12</sup>.</p>

Key Waste Arising from Activities

Activity	Waste Arising	Disposal/ Regulation
Site Construction	<ul style="list-style-type: none"> <li>• Road planings</li> </ul>	<p>Further on-site investigations of the carriageway condition are required, including Coring and Testing. Due to this, the condition of surfacing has not yet been fully determined, including presence of coal tar. As such, presence of tar is not currently known for this scheme.</p> <p>Presence of tar will be confirmed prior to the commencement of the works.</p> <p>If testing does not identify any coal tar within the scheme extents, road planings generated as a result of the works will be recovered in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings'.</p> <p>If evidence of tar is identified during further site investigations, any tar-contaminated planings will be</p>

<sup>12</sup> Transport Scotland TS2010 Surface Course Specification and Guidance Issue 04, 2018 (as amended)

Description of Local Environment:		
		<p>removed off site for treatment/disposal at a licenced waste facility, and the following will apply:</p> <ul style="list-style-type: none"> <li>• A SEPA consignment note will be obtained.</li> <li>• SEPA will be informed at least three days prior to the movement of special waste.</li> </ul>
<p>9. Cultural Heritage</p> <p>PastMap<sup>13</sup> has not highlighted any features of cultural heritage within proximity of the works.</p>		
<p>10. Landscape</p> <p>Surrounding landscape consists of agricultural land, wooded strips, and residential areas. Vegetated strips flank the carriageway intermittently throughout the scheme extents<sup>1415</sup>.</p> <p>The A78 carriageway within the scheme extents does not fall within any designation for landscape quality or character.</p>		
<p>11. Vulnerability of the Project to Risks</p> <p>The Indicative River &amp; Coastal Flood Map<sup>16</sup> by SEPA has highlighted small areas of the A78 carriageway within the scheme extents as being at risk of surface water flooding, along the course of the issues.</p> <p>Road drainage is provided by a combination of top entry gullies and filter drain.</p> <p>No other existing vulnerabilities exist at the scheme location.</p>		

Description of the main environmental impacts of the project and proposed mitigation:	
<p>The following environmental impacts have been numbered to follow the appropriate DMRB chapters for environmental assessment and do not reflect a ranking of impact severity. Construction and operational impacts, including impact on Policies and Plans, are covered within each environmental topic heading where applicable.</p>	
1. Population and Human Health	<p>1.1 Impacts</p> <ul style="list-style-type: none"> <li>• Due to its location off the carriageway, no impact is predicted to the Core Path.</li> <li>• Laybys within the scheme extent may be inaccessible during the works.</li> <li>• Residential properties within proximity may experience a level of disturbance during the works, including potential for sleep disruption due to night-time working.</li> </ul>

<sup>13</sup> <https://pastmap.org.uk/map> (Accessed 30/03/2021)

<sup>14</sup> <https://sitelink.nature.scot/map> (Accessed 30/03/2021)

<sup>15</sup> <https://pastmap.org.uk/map> (Accessed 30/03/2021)

<sup>16</sup> <http://map.sepa.org.uk/floodmap/map.htm> (Accessed 30/03/2021)

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Description of the main environmental impacts of the project and proposed mitigation:	
	<ul style="list-style-type: none"> <li>Traffic management (TM) for the works will likely involve a combination of single lane closures and full NB carriageway closures, facilitated by contraflow; <ul style="list-style-type: none"> <li>TM may result in temporary closure of off-slip, with associated diversion route,</li> <li>Off-slip diversion route may cause increased traffic levels and disturbance to the surrounding road networks, and may cause slight levels of disruption and impact on journey times</li> </ul> </li> <li>This section of carriageway will benefit from reduced reoccurring routine maintenance and associated levels of disruption due to TS2010 durability.</li> <li>TS2010 road surfacing will be utilised, which should improve the skid resistance and reduce mid to high frequencies of traffic levels.</li> </ul>
1.2	<p>Mitigation</p> <ul style="list-style-type: none"> <li>Advance traffic warning signs will be placed prior to road closures in order to inform road users of temporary traffic management arrangements. The road closures/restrictions will be widely publicised within the local and wider area, in an effort to minimise disturbance to vehicular travellers.</li> <li>In the event of night-time works, North Ayrshire and South Ayrshire Council's Environmental Health Department will be contacted in advance of the works. This will be undertaken by the Environmental and Sustainability (E&amp;S) Team.</li> <li>Residential properties in proximity shall be notified in advance of the works, providing details of timings, nature, and duration of the works.</li> <li>Operatives will be briefed with the 'Being a Good Neighbour' and 'Noise and Vibration' environmental briefings before starting works.</li> <li>Effects from noise shall be kept to a minimum through the use of appropriate mufflers and silencers fitted to machinery. All exhaust silencers will be checked at regular intervals to ensure efficiency.</li> <li>The noisiest works will be scheduled for before 11:00pm where feasible.</li> </ul> <p>The residual impact to population and human health is considered slight beneficial.</p> <p>It has been determined that the proposed project will not have direct or indirect significant effects to Population and Human Health.</p>
2.	Biodiversity
2.1	<p>Impacts</p> <ul style="list-style-type: none"> <li>Protected species may be active within the local surrounding environment.</li> <li>Works are programmed to take place in May, at the beginning of bat active season (May-October inclusive); <ul style="list-style-type: none"> <li>Permanent carriageway lighting exists for a section of the A78 carriageway within the scheme extents. As such, additional lighting for the works is not predicted to have a significant impact on nearby nocturnal species.</li> </ul> </li> </ul>
2.2	<p>Mitigation</p>

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Description of the main environmental impacts of the project and proposed mitigation:
<ul style="list-style-type: none"> <li>On site light sources shall be kept to a minimum, and only used as required. Any artificial light will be directed at the area of works as far as reasonably practicable, reducing any light spill into the wider surroundings, and potentially sensitive habitat (e.g. woodland).</li> <li>If a protected species is seen on or near the scheme, all works will be stopped until the animal passes by. The area will be isolated temporarily until the animal has moved on; <ul style="list-style-type: none"> <li>The E&amp;S team shall be contacted for any guidance if required, and the control room will be contacted for environmental record.</li> </ul> </li> </ul> <p>On the condition that best practice is adhered to, residual impact to local biodiversity is considered neutral as a result of the works.</p> <p>It has been determined that the proposed project will not have direct or indirect significant effects to Biodiversity.</p>
<p>3. Land</p> <p>3.1 Impacts</p> <p>The works will be kept to the existing A78 carriageway boundary and will not require or prevent access to private or community land out with the works area. Plant, materials and any temporary storage will be restricted to the made carriageway surface only.</p> <p>It has been determined that the proposed project will not have direct or indirect significant effects to land.</p>
<p>4. Soil</p> <p>4.1 Impacts</p> <p>All works will operate on a like-for-like basis and remain restricted within the existing carriageway footprint. No excavations beyond the existing engineered footprint will be required as part of the works, and as such no soils will be impacted.</p> <p>It has been determined that the proposed project will not have direct or indirect significant effects to local soils.</p>
<p>5. Water</p> <p>5.1 Impacts</p> <ul style="list-style-type: none"> <li>Potential for fuel/chemical spillages through the operation of resurfacing and use of various machinery and vehicles, which may affect the water environment if not effectively controlled.</li> <li>If not appropriately controlled, debris and run off from the works has the potential to enter nearby drains and watercourses and could detrimentally impact water quality.</li> <li>Potential for flooding to occur within the works area; <ul style="list-style-type: none"> <li>Potential for flooding to delay works, and</li> <li>Potential for pollution via flooding.</li> </ul> </li> </ul> <p>5.2 Mitigation</p>



**Description of the main environmental impacts of the project and proposed mitigation:**

- Best practice, as detailed by SEPA Guidance for Pollution Prevention (GPPs), will always be followed onsite. This will ensure that any potential sediments / spills are not allowed to enter road drainage unchecked.
- Appropriate measures shall be implemented onsite to prevent any potential pollution to the natural water environment (e.g. debris, dust and hazardous substances). This will include, but will not be limited to, utilisation of drain covers, spill kits being present onsite at all times, and the use of funnels and drip trays when transferring fuel.
- Visual pollution inspections of the working area will be conducted in frequency, especially during heavy rainfall and wind.
- Debris and dust generated as a result of the works shall be prevented from entering nearby watercourses and the road drainage system, via the use of drain covers or similar.
- All debris which has the potential to be suspended in surface water and wash into the local water environment shall be cleaned from the site following the works.
- Weather reports will be monitored prior to the works, with all construction activities temporarily halting in the event of predicted high rainfall or wind.

Providing all works operate in accordance with current best practice, the residual impact on the local water environment is considered to be neutral.

It has been determined that the proposed project will not have direct or indirect significant effects to water.

6. Air

6.1 Impacts

- The use of vehicles, plants and generators emitting carbon emissions may temporarily affect air quality and will require the use of finite resources.
- On site construction activities carry a potential to produce airborne particulate matter that may have a slight impact on local air quality levels.
- Diversion route, if required, is likely to increase traffic levels and associated emissions within local road networks.

6.2 Mitigation

- No site-specific mitigation has been identified as being required to mitigate air quality. All works shall operate in accordance with current best practice as outlined in the Guidance on the assessment of dust from demolition and construction (2014) published by the IAQM, which includes the following mitigation relevant to this scheme:
  - When not in use plant and vehicle will be switched off; there will be no idling vehicles.
  - All plant and fuel-requiring equipment utilised during construction shall be well maintained in order to minimise emissions, as per manufacturing and legal requirements.
  - Green driving techniques will be adopted, and effective route preparation and planning shall be undertaken prior to works.
  - Planing operations will be wetted to reduce dust arising.
  - Drop heights to haulage vehicles and onto conveyors will be minimised.
  - Lorries will be sheeted when carrying dry materials.

Description of the main environmental impacts of the project and proposed mitigation:	
<ul style="list-style-type: none"> <li>Surfaces will be swept where loose material remains following planning.</li> </ul> <p>Providing all works operate in accordance with current best practice, the residual impact for air is considered neutral.</p> <p>It has been determined that the proposed project will not have direct or indirect significant effects to local air quality.</p>	
7.	Climate
7.1	Impacts
	<ul style="list-style-type: none"> <li>Greenhouse gas emissions will be emitted through the use of machinery, material production, materials used (containing recycled and virgin materials), and transporting to and from site.</li> </ul>
7.2	Mitigation
	<ul style="list-style-type: none"> <li>Where possible local suppliers will be used as far as practicable to reduce travel time and greenhouse gas emitted as part of the works.</li> <li>Vehicles / plant shall not be left on when not in use to minimise and prevent unnecessary emissions being emitted.</li> <li>Further actions and considerations for this scheme are detailed in section 8 Material Assets and Waste.</li> </ul> <p>It has been determined that the proposed project will not have direct or indirect significant effects to climate.</p>
8.	Material Assets
8.1	Impacts
	<ul style="list-style-type: none"> <li>The works will result in contribution to resource depletion through use of virgin materials.</li> <li>Greenhouse gas emissions will be generated by material production, and via transporting elements to and from site.</li> <li>The transportation and recovery of planings will require energy deriving from fossil fuel.</li> <li>A limited quantity of waste from sweeping will arise requiring disposal.</li> </ul>
8.2	Mitigation
	<ul style="list-style-type: none"> <li>Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications to reduce natural resource depletion.</li> <li>Road planings generated will be recovered by a licenced contractor for reuse and / or recycling in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings'.</li> <li>The chosen material TS2010 Surface Course 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.</li> </ul>

**Description of the main environmental impacts of the project and proposed mitigation:**

- Road sweeping waste will be treated at a licenced facility to separate useful materials such as stone/aggregate as far as reasonably practicable, recovering this waste and diverting it from landfill.

Circular Economy

The design life for the TS2010 surfacing proposed is estimated to be 20 years. This will reduce the requirement for maintenance to this section of road over the period.

It has been determined that the proposed project will not have direct or indirect significant effects to the consumption of material assets or disposal of waste.

9. Cultural Heritage

9.1 Impacts

The works will be kept to the existing carriageway and will be like-for-like in nature, and as such will have no impact on potential features of undiscovered cultural heritage.

It has been determined that the proposed project will not have direct or indirect significant effects to cultural heritage.

10. Landscape

10.1 Impacts

Views of, and from, the road will be temporarily affected during construction due to the presence of works, traffic management and plant. As the works are operating on a like-for-like basis, no permanent changes to landscape features are predicted.

It has been determined that the proposed project will not have direct or indirect significant effects to local landscape.

11. Vulnerability of the Project to Risks

As the works will be limited to the like-for-like replacement of the carriageway pavement and associated road furniture, there is no change to the vulnerability of the road to the risk or severity of major accidents/disasters that would impacts on the environment.

It has been determined that the proposed project is not expected to alter the vulnerability of the existing trunk road infrastructure to risk of major accidents or disasters.

**Extent of EIA work undertaken and details of consultation:**

The following environmental parameters have been considered within this Record of Determination:

- Population and Human Health
- Biodiversity
- Land
- Soil
- Water

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### Extent of EIA work undertaken and details of consultation:

- Air
- Climate
- Material Assets
- Cultural Heritage
- Landscape

The following statutory organisations have been consulted:

- North Ayrshire and South Ayrshire Environmental Health Teams have been notified of the proposed works.

The following environmental surveys/ reviews have been undertaken:

- A design Initial Environmental Review of the scheme, undertaken by the Environmental and Sustainability Team at Amey in March 2021.

### Statement of case in support of a Determination that a formal EIA and Environmental Impact Assessment Report is not required:

The works are considered to constitute a relevant project falling within Annex II as referred to in the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended), since they 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). Screening using Annex III criteria, reference to consultations undertaken and review of available information has identified there is no need for a full EIA.

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

#### *Characteristics of the scheme:*

- Construction activities are restricted to the 17,000m<sup>2</sup> (1.7ha) area of existing carriageway.
- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications.
- The chosen material TS2010 Surface Course allows a wider array of aggregate sources to be considered when compared to typical stone mastic asphalt (SMA).
- Where feasible, road planings will be fully recycled in accordance with Guidance on the Production for Fully Recovered Asphalt Road Planings.
- The design option (replacing the defective surfacing) conveys sustainability benefits by significantly reducing the quantity of maintenance interventions required at the location over approximately 20 years.

#### *Location of the scheme:*

- The scheme will be confined within the existing carriageway boundaries and as a result will not require any land take and will not alter any local land uses.

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- The scheme is not situated in whole or in part in a “sensitive areas” as listed under regulation 2 (1) of the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended).

*Characteristics of potential impacts of the scheme:*

- As the works will be limited to the like-for-like replacement of the carriageway pavement, 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.
- No significant residual impacts are predicted. Disruption due to construction activities are not expected to be significant and will be mitigated as far as is reasonably practicable.
- The successful completion of the scheme will afford benefits to road users, due to improved condition and ride quality of the carriageway surface.
- The use of TS2010 road surfacing affords the benefits of a reduction in mid to high frequencies of traffic noise and a reduction in ground vibrations. As a result, ambient noise levels should decrease post construction.

## Appendix 1: Scheme Location and Extents