EC DIRECTIVE 2011/92/EU (as amended)

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

RECORD OF DETERMINATION

Name of Project:

A75 Ramhill to Allanton Roundabout

Location:

The scheme is located on the A75 carriageway north of Castle Douglas, within Dumfries and Galloway. The works have the following National Grid References:

- Scheme Start: NX 77890 64867
- Scheme End: NX 77197 64216

The length of the scheme is approximately 1km with an area of approximately 11,173m^2.

Description of Project:

The works are required to maintain the safety and integrity of the A75 carriageway. Currently the road surfacing within the scheme extents is exhibiting areas of fretting, particularly in the wheel tracks. The roundabout is in severely bad condition with structural defects presenting in alligator, longitudinal and transverse cracking. Exiting the roundabout, large potholes are present in the centre of the carriageway coupled with longitudinal cracks which continue throughout.

Works will involve carriageway surface reconstruction utilising TS2010 treatment to depths of between 30mm and 40mm across the full scheme. In addition, some areas of deeper treatment will be required to depths of 110mm and 320mm inlays.

Construction activities will likely include:

- Milling of existing bituminous material by road planer;
- Hand-held jackhammer and compressor for breaking up surfaces not accessible by planer;
- Loader/excavator used to collect and move excess material;
- Base/binder material laid and compressed (where required);
- New bituminous material laid by a paver;
- Material compacted using a heavy roller;
- Mechanical sweeper to collect loose material;
- HGV for removal and replacement of material;
- Road markings replaced.

The works are currently scheduled for January 2021. The duration of construction has yet to be confirmed, however works are likely to extend over a period of three to five days. There will be no night time working.

Traffic management will likely involve a full closure of the carriageway with a suitable diversion route in place.

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 are located along a rural stretch of the A75 carriageway with the surrounding environment consisting primarily of arable land. One residential property is located within 100m of the works. The property, Allanton, is situated approximately 30m west of the northbound A75 carriageway within the scheme extents.

The works do not fall within a Candidate Noise Management Area (CNMA) as defined by the Transportation Noise Action Plan, Road Maps[1].

Baseline noise is likely at the works location is likely to be primarily influenced by vehicle traffic from the carriageway and local agricultural activities.

Access to Allanton and local farmland is gained directly via the A75 carriageway within the scheme extents.

A bus stop is located adjacent to the southbound carriageway, prior to the Allanton roundabout.

2. Biodiversity

The works are located along a rural stretch of the A75 carriageway. Agricultural fields dominate the surrounding habitat, with minor areas of intermittent scrub and individual trees spread throughout the scheme extents.

A desktop study using NatureScot Sitelink[2] does not highlight any Natura 2000 sites which are located within 2km or share connectivity with the proposed works. No nationally or locally designated sites have been identified within 300m of the proposed works.

Amey's Animal Roadkill Database (2013 – 2020) has not highlighted any protected species roadkill within the scheme extents.

Amey's Invasive Non-native Species Database has highlighted three growths of Japanese knotweed *Fallopia japonica* within the scheme extents.

[1] https://noise.environment.gov.scot/action-planning-round-two.html (Accessed on 12/10/2020)
[2] https://sitelink.nature.scot/map (Accessed on 12/10/2020)

Description of Local Environment:
Given that the surrounding environment within proximity to the works consists of open, low-lying agricultural fields with minimal/no vegetation cover, the area has been deemed unsuitable for protected species shelter. As a result, no field survey was required. No statutory consultation will be required.
3. Land The trunk road footprint consists of two northbound and one southbound lanes and a roundabout. Road verges are vegetated with low lying grass and thin intermittent strips of scrub/trees. On site work activities will be confined within the A75 carriageway boundary and will not require access over any private or community land.
4. Soil The National Soil Map of Scotland has highlighted the surrounding local soils to consist primarily of brown earths. An area of noncalcareous gleys can be found south of the works and in the wider area[3]. The scheme is not located within, or within proximity to, any Local Geodiversity Sites (formerly known as RIGS)[4] or geologically designated SSSIs[5]. A desktop study using the British Geological Survey Map[6] has identified major local geology type as the following: - Bedrock Geology: Carghidown Formation – Wacke. Sedimentary bedrock formed approximately 433 to 444 million years ago in the Silurian Period. Local environment previously dominated by deep seas. - 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.
5. Water SEPA's Water Classification Hub Map[7] does not identify any watercourses within proximity of the works. The Indicative River & Coastal Flood Map[8] by SEPA has not highlighted a risk of flood within the scheme extents. Drainage is managed by drainage grips and filter drain.

[3] http://map.environment.gov.scot/Soil_maps/?layer=1 (Accessed on 12/10/2020)
[4] https://www.google.com/maps/d/viewer?mid=1HfclRWcITRxXUZWNARManI-PUhE&ll=57.74680670722851%2C-5.313263556249922&z=6 (Accessed on 12/10/2020)
[5] https://sitelink.nature.scot/map (Accessed on 12/10/2020)
[6] http://mapapps.bgs.ac.uk/geologyofbritain/home.html (Accessed on 12/10/2020)
[7] https://www.sepa.org.uk/data-visualisation/water-classification-hub/ (Accessed on 12/10/2020)
[8] http://map.sepa.org.uk/floodmap/map.htm (Accessed on 12/10/2020)

Description of Local Environment:

6. Air

The A75 is a main route connecting Dumfries to Stranraer. Rural land encompasses the scheme location. Traffic count in 2019 was 5,970 vehicles per day, with an average of 28% heavy goods vehicle.

Local air quality is likely to be impacted by road traffic and rural land use activities.

No Air Quality Management Areas have been declared by Dumfries and Galloway Council[9].

7. Climate

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).

Amey, working on behalf of Transport Scotland, undertake carbon monitoring. Emissions from our activities are recorded using Transport Scotland's Carbon Management System.

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 and Waste

Activity	Material Required	Origin/ Content
Site Construction	• TS2010 Surface (bitumen and aggregate) • Road Paint / studs • AC32 / AC20 Binder	A proportion of reclaimed asphalt pavement (RAP) is used in asphalt production. Typical RAP values for base and binder are 10% - 15% with up to 10% in surface course. 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[10].

Key Waste Arising from Activities

Activity	Waste Arising	Disposal/ Regulation
Site Construction	• Road Planings	Road planings generated as a result of the works will be fully recovered in accordance with the criteria stipulated within SEPA

[9] http://www.scottishairquality.scot/laqm/aqma (Accessed 12/10/2020)
[10] Transport Scotland TS2010 Surface Course Specification and Guidance Issue 04, 2018 (as amended)

Description of Local Environment:		
		document 'Guidance on the Production for Fully Recovered Asphalt Road Planings'[11]. 22 cores were tested, none of which contained coal tar. Special waste disposal will not be required.

9. Cultural Heritage

A desktop study using PastMap[12] has identified the following feature of cultural heritage within proximity of the works:

- *Gerranton*, a Category B Listed Building (LB3705), located approximately 280 north-west of the works.

10. Landscape

A desktop study using PastMap[13] and Nature Scot Sitelink[14] online interactive map has not highlighted any areas designated for landscape characteristics within the works location.

Historic Environment Scotland's HLAMap[15] has highlighted the surrounding landscapes as Rectilinear Fields and Farms and a small area of Plantation.

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

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.

1. Population and Human Health

1.1 Impacts

- The bus stop within the scheme extents will be out of use during the works.
- Access to residential properties may be temporarily restricted during the work;
- Traffic management will involve a full closure of the A75 carriageway within the scheme extents;
- TM arrangements may cause delays to road users and increase congestion on local roads;
- TS2010 road surfacing is shown to have superior durability and noise reducing features compared to standard road surfacing mixes; thus preventing the need for reoccurring routine maintenance and associated levels of disruption.

[11] SEPA Guidance on the Production of Fully Recovered Asphalt Road Planings
[12] https://pastmap.org.uk/map (Accessed on 12/10/2020)
[13] http://pastmap.org.uk/ (Accessed on 12/10/2020)
[14] https://sitelink.nature.scot/map (Accessed on 12/10/2020)
[15] https://map.hlamap.org.uk/ (Accessed on 12/10/2020)

Description of the main environmental impacts of the project and proposed mitigation:
1.2 Mitigation • Given that access to Allanton is gained via the carriageway, the property will be notified in advance of the timing, nature and duration of the works, as well as any potential access restrictions; • The road closures/restrictions will be widely publicised within the local and wider area, in an effort to minimise disturbance to vehicular travellers. • Bus closures will be advertised prior to commencement of works, to minimise disruption to local users; • Local access must be granted by site operatives as and when required. The residual impact to population and human health is considered negligible. Upon completion, the works will have a slight beneficial impact for all road users. It has been determined that the proposed project will not have direct or indirect significant effects to Population and Human Health.
2. Biodiversity 2.1 Impacts • Works have the potential to spread the invasive plant Japanese knotweed. 2.2 Mitigation • Operatives will be briefed in advance of the location of the Japanese knotweed with the relative toolbox talk. If appropriate, an exclusion zone will be set up to prevent access. • No machinery, traffic management, or site operatives will enter the verge within the vicinity of the Japanese knotweed. • If any protected species are sighted within the works area, all works will temporarily halt until the animal has moved on. Any sightings should be reported to the E&S Team. No residual impact is predicted to local biodiversity. It has been determined that the proposed project will not have direct or indirect significant effects to Biodiversity.
3. Land The works will be kept to the existing A75 carriageway boundary and will not require access to private or community land.Plant, materials and any temporary storage will be kept to the made carriageway surface only. It has been determined that the proposed project will not have direct or indirect significant effects to land.
4. Soil The works will be kept to the existing carriageway and soils shall not be impacted. It has been determined that the proposed project will not have direct or indirect significant effects to soil.

Description of the main environmental impacts of the project and proposed mitigation:
5. Water 5.1 Impacts No site specific impacts have been highlighted. 5.2 Mitigation • Best practice, as detailed by SEPA's 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. 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 and plants emitting exhaust fumes may temporarily affect air quality. • On site construction activities carry a potential to produce dust that may have a slight impact on local air quality levels. 6.2 Mitigation • Best practice measures will to be adopted for the duration of the scheme. Best practices measures will include but not limited to: - Vehicle and plant servicing/checks as per manufacturing and legal requirements; - Adoption of drive green techniques; - Route preparation and planning. - When not in use plant and vehicle will be switched off. • 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. • Surfaces will be swept where loose material remains following planing. It has been determined that the proposed project will not have direct or indirect significant effects to air quality.
7. Climate 7.1 Impacts • Greenhouse gas emissions will be emitted through the use of machinery, vehicles and materials used (containing recycled and virgin materials). 7.2 Mitigation • Where possible local suppliers will be used as far as practicable to reduce travel time and greenhouse gas emitted as part of the works; • Vehicles / plant shall not be left on when not in use to minimise and prevent unnecessary emissions being emitted. • Further actions and considerations for this scheme are detailed in section 8 Material Assets.

Description of the main environmental impacts of the project and proposed mitigation:
It has been determined that the proposed project will not have direct or indirect significant effects to climate.
8. Material Assets and Waste 8.1 Impacts • Contribution to resource depletion through use of virgin materials, • Greenhouse gas emissions generated by material production and transporting to and from site, • Transportation and recovery of planings will require energy deriving from fossil fuel, • Limited quantity of waste from sweeping will arise requiring disposal. 8.2 Mitigation • Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications to reduce natural resource depletion. • 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'. • 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. • 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. <u>Circular Economy</u> 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 Given the restriction of the works to the existing carriageway and the distance separating works from the above highlighted features of cultural heritage, no impact is predicted. It has been determined that the proposed project will not have direct or indirect significant effects to Cultural Heritage.
10. Landscape Works will be like for like in nature and will not have any lasting visual change. Views of and from the road will be impacted by the presence of traffic management, plant and vehicles during construction. This is predicted to be a slight temporary impact locally, with no permanent change to views following the completion of works. It has been determined that the proposed project will not have direct or indirect significant effects to Landscape.

Description of the main environmental impacts of the project and proposed mitigation:
11. Vulnerability of the Project to Risks 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.

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

The following statutory organisations have been consulted:

- N/A

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 October 2020.

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:

Transport Scotland

Record of Determination A75 Ramhill to Allanton Roundabout

Characteristics of the scheme:

- Construction activities are restricted to the 11,173m² / 1.1 ha 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 SMA.
- 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.
- 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).

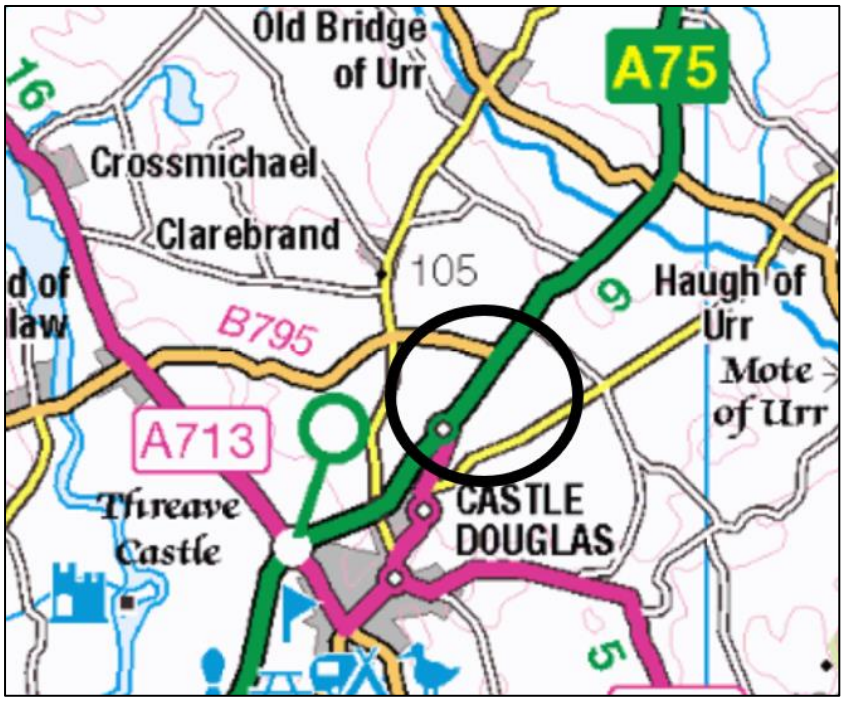
Characteristics of potential impacts of the scheme:

- 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.
- 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.

File references of supporting documentation:

Appendix 1 – Scheme location and extent

APPENDIX 1: SCHEME LOCATION AND EXTENTS



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