

WHAT HAPPENS NEXT

Following the publication of draft Road Orders, members of the public may comment on the proposals until 16th January 2015.

All comments on the proposals will be considered and resolved where possible. In the event that resolution is not possible the Scottish Ministers may instruct that a Public Local Inquiry (PLI) into the draft Statutory Orders be held. If this is necessary all interested parties will be informed of the arrangements and notices will be placed in the local press to allow all members of the public the opportunity to attend. Following the conclusion of the statutory processes, the scheme may be taken forward to construction, including any amendments recommended at the PLI. The construction contract for the works will be subject to a competitive tendering process and the contract prepared will include all engineering and environmental mitigation included in the proposed design, with appropriate amendments as determined by the PLI process, if any.

FURTHER INFORMATION

Copies of the draft Statutory Orders and the Environmental Report will be available for inspection, during normal business hours, free of charge at the following locations:

- **Transport Scotland, Reception, 9th Floor, Buchanan House, 58 Port Dundas Road, Glasgow, G4 0HF**
- **Highland Council Headquarters, Glenurquhart Road, Inverness, IV3 5NX**
- **Dunbeath Post Office, Caithness, KW6 6EA**
- **Golspie, Olsen House, Main Street, KW10 6RA**
- **Thurso, Rotterdam Street, KW14 8AB**
- **Wick, Girnigoe Street, KW1 4HW**

Copies of the Scheme Summary Report are available free of charge. The Environmental Report can also be viewed for free on the Transport Scotland Website:

www.transportscotland.gov.uk

A9 Berriedale Braes Improvement



Scheme Summary Report Nov 2014

URS



EXISTING VIEW FROM BEACON TOWER (ADJACENT TO BERRIEDALE CASTLE)



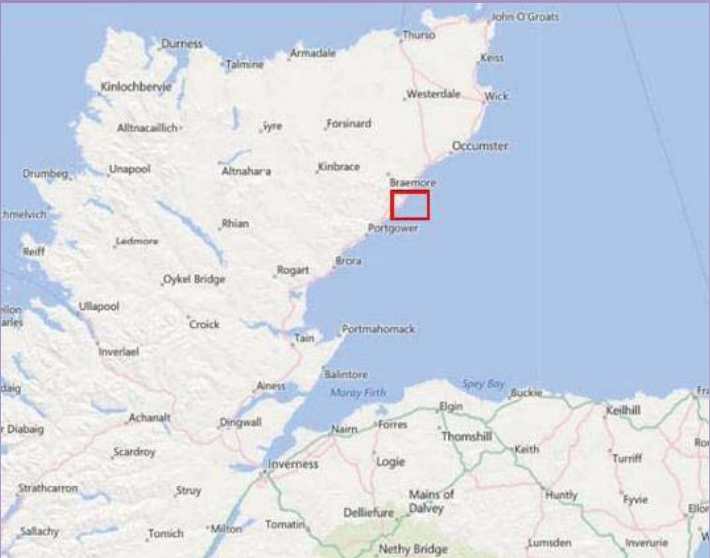
PHOTOMONTAGE SHOWING PROPOSED SCHEME FROM BEACON TOWER

IF YOU WISH TO MAKE REPRESENTATION ON THE SCHEME, PLEASE WRITE TO DIRECTOR OF MTRIPS, TRANSPORT SCOTLAND, BUCHANAN HOUSE, 58 PORT DUNDAS ROAD, GLASGOW, G4 0HF BEFORE 16TH JAN 2015.



INTRODUCTION

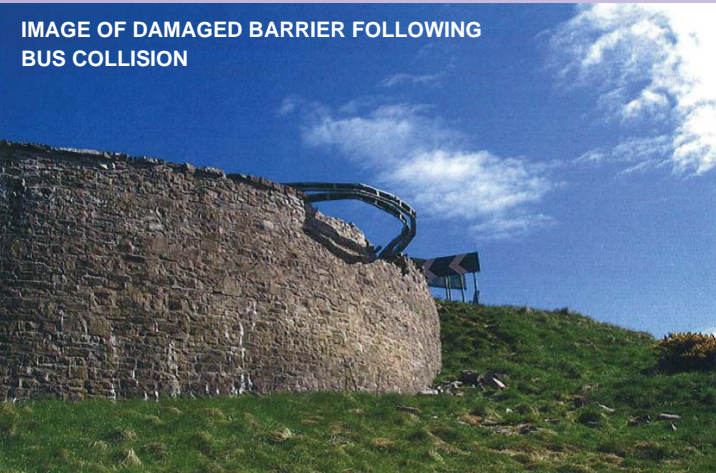
Transport Scotland are working with its funding partners; the Nuclear Decommissioning Authority, Hitrans and The Highland Council to improve the A9 Trunk Road at Berriedale Braes. The improvements seek to remove the hairpin bend just north of the Berriedale Village and locally improve the alignment at this location. This document provides a summary of the work carried out to develop the A9 Berriedale Braes Improvement Scheme, including a summary of the environmental assessment that was carried out alongside the engineering design. This document accompanies the publication of the draft Roads Order and draft Compulsory Purchase Order published 21st November 2014.



NEED FOR THE SCHEME

Berriedale Braes is located north of Helmsdale and south of Dunbeath on the A9 Trunk Road in Caithness and forms part of the strategic road network north of Inverness. The location of the Scheme is shown above.

The road is set in a demanding terrain and requires steep gradients and tight bends on either side of the Berriedale village to fit within the surrounding landscape. North of the village a hairpin bend with a 13 metre radius and 11% gradient has been introduced to affect the change in level within the rugged and steep topography. Currently, two HGVs approaching in opposite directions cannot pass on the hairpin bend, as the northbound vehicle takes up most of the carriageway in order to negotiate the bend. This is an operational and safety issue. This was highlighted when an athletics club bus travelling south mis-judged the bend and it was only the safety barrier that prevented the bus going over the edge of the cliff.



OBJECTIVES OF THE SCHEME

Objectives for the current work were set early in the process and the route now proposed has been assessed against these objectives. The objectives for the improvements can be summarised as follows.

The improvement scheme will ensure that all vehicles are able to travel on the A9 at Berriedale Braes without having to stop or give way to vehicles travelling in the opposite direction. The improvement scheme will also:

- Minimise the impacts of disruption to the existing route during construction;
- Minimise the risk and potential serious consequences of errant vehicles leaving the carriageway; and
- Ensure one lane remains open during periods of maintenance and vehicle breakdown.

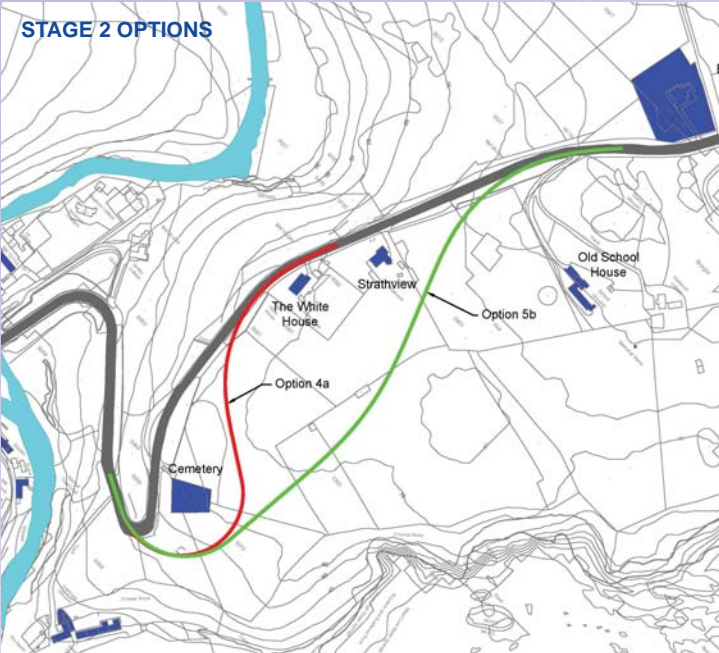
The improvement recognises that the A9 at this location is a lifeline route and will contribute to sustaining and enhancing the social and economic development of Caithness, Orkney and northern Sutherland. It will maximise the economic transport user benefits while taking cognisance of the capital and future operation and maintenance costs.

The environmental impact of the improvement scheme will be minimised and, where possible, will provide opportunities for enhancing the natural and built environment. In particular attention will be paid to ecology, visual impacts and landscape impacts.

The improvement scheme will aim to gain support from stakeholders, including the local community, to enable a smooth passage through the statutory process thereby minimising potential delay to implementation.

ALTERNATIVES CONSIDERED

A wide range of options were considered and these were reduced to the two options assessed in detail in the Stage 2 Scheme Assessment Report, issued in March 2014. The two options assessed in that report are shown below. The report concluded that Option 4a is the Preferred Route and that it is developed in more detail in Stage 3 of the design. This assessment is discussed in more detail in the sections that follow.



The construction works will have a temporary impact on the setting of the Berriedale Castle, however, once the Scheme is constructed and open to traffic it is considered that there will be no change to the setting. No significant impacts were identified on any other cultural heritage designations; however, minor impacts have been identified for the White House (category C listed building) and Berriedale Cemetery which is a non-designated asset.

Pre-construction archaeological surveys will be carried out to ensure there are no impacts on 'unknown' assets. Landscape planting has been carefully considered as part of the Scheme design to minimise any impacts on the setting of Berriedale Castle.

ROAD DRAINAGE & WATER ENVIRONMENT

The significant water resources in the area include the Berriedale and Langwell Waters, the coastal water and the groundwater beneath the Scheme. The assessment considered the impact during both construction and post construction when the new road is open to traffic.

A Construction Environmental Management Document will be prepared by the Contractor to ensure that control measures are in place to reduce the potential of pollution affecting surrounding water bodies.

Once the Scheme is constructed, road run off from the A9 would be collected and passed through three levels of Sustainable Drainage Systems (SUDS) for treatment before being discharged to the Berriedale Water. No significant adverse effects on the existing water quality of the watercourses or coastal water are predicted as a result of the proposals.

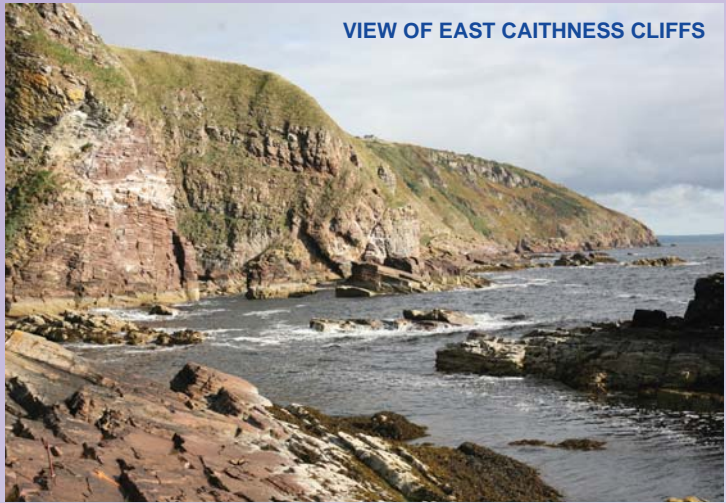


NOISE & VIBRATION

The proposed Scheme will result in both temporary noise impacts during the construction works and permanent noise impacts after the new road has been built and is open to traffic. In addition, blasting works required during the construction will result in temporary impacts.

The impact of construction noise construction works is classed as moderate at the closest affected residential properties. A range of best practice noise reducing measures will be adopted by the contractor following consultation with The Highland Council. Blasting (if required) may result in moderate vibration impacts on nearby residential properties, which will be monitored by the Contractor. Impacts at the East Caithness Cliffs SPA/SAC and Berriedale Cliffs SSSI will be avoided through the timing of the works outside of the breeding bird season.

Once the Scheme is constructed, residential properties within 600m are expected to experience a negligible impact in daytime traffic noise. A negligible increase in traffic noise levels in the long term is also predicted at all the identified non-residential receptors, except for the East Caithness Cliffs SPA/SAC and Berriedale Cliffs SSSI, where a small area is predicted to experience a minor increase.



MATERIALS

The construction of the Scheme will require the use of building materials and will also generate surplus material. Due to the local topography it will be necessary to excavate large amounts of rock and soil to construct the road. Some of the excavated material will be reused on site and provide landscape re-profiling of the old redundant road. The rest of the material will be removed off site.

It was concluded that construction of the scheme will result in negligible carbon emissions.

In order to mitigate the impacts of the Scheme, the contractor will be required to produce a Construction Environmental Management Document and clearly specify how the surplus material will be dealt with. The Contractor will also carry out the works in such a way that, as far as is practicable, the amount of surplus material to be disposed of is minimised.





A targeted non-statutory environmental assessment was carried out and an Environmental Report has been prepared to accompany the draft Roads Orders.

The environmental assessment has been informed by consultations with a wide range of organisations and landowners. This information and the findings of the assessments have been used to help develop the design of the Scheme by ensuring that wherever possible, adverse effects on people and the natural and cultural environment would be avoided and environmental benefits delivered.

The Environmental Report provides an assessment on the likely effects of the proposed Scheme and its purpose is to act as a targeted report on the main likely impacts and proposes mitigation measures (measures that would be implemented to avoid, reduce or remedy adverse environmental impacts) to be taken forward to the construction contract. A summary of each of the environmental topics covered in the report is provided below.

LANDSCAPE AND VISUAL AMENITY

A review of the site and the surrounding area was undertaken in order to identify any sensitive landscapes, establish the existing landscape character, and identify key viewpoint locations.

The proposed Scheme will not be visible from the majority of residential properties within the area and so visual effects will be limited. However, there will be some significant temporary effects on views during construction. Negative effects will be reduced once the construction phase is complete and will further reduce as the proposed planting matures. In the long-term, significant effects are anticipated on views from Berriedale Castle and the Beacon Tower, with the remaining viewpoints not significantly affected.



The landscape character assessment concluded that the proposed Scheme would not significantly affect the overall impression of the landscape character of the area. However, there would be some localised effects which would reduce as the proposed planting matures and are not considered significant in the long term.

Landscape proposals have been designed to provide partial screening and to help integrate the Scheme to the character of the landscape. The design largely consists of native woodland planting, grass and wildflower seeding. As mitigation planting establishes over time the overall effects on landscape character would not be significantly adverse. Operation visual effects at all locations would be reduced and visual effects would be further reduced as mitigation planting matures, with significant visual effects being limited to two locations (Berriedale Castle and Beacon Tower).

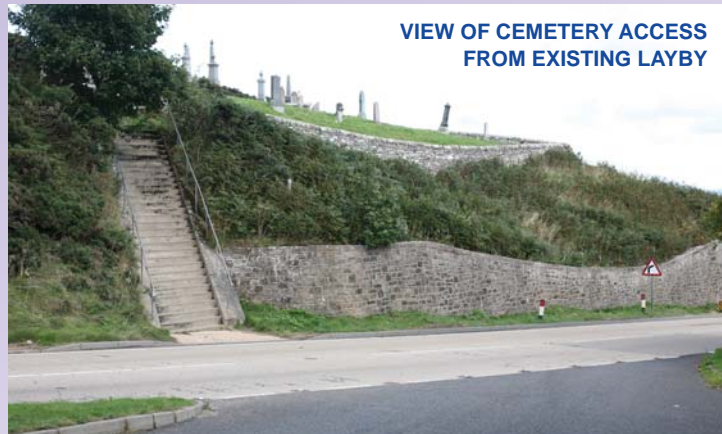
NATURE CONSERVATION

The Scheme is in close proximity to, but does not directly impinge upon, East Caithness Cliffs SPA and SAC, Berriedale & Langwell Water SAC and Berriedale Cliffs Site of Special Scientific Interest (SSSI). Ecological surveys undertaken in 2013-2014 included habitats/plants, breeding birds, bats, otters and other protected mammals. This included specific surveys of protected seabirds in nearby parts of East Caithness Cliffs SPA, small breeding populations of which were found on cliffs near the Scheme.

Minor impacts are expected from a minor loss of mature trees and grassland. No adverse impacts are expected on any designated sites. Potential disturbance of SPA-protected seabirds is most likely from rock-blasting and piling but will be avoided by restricting these activities to the non-breeding season. Tree/shrub planting of locally native species including juniper and the provision of a drainage basin will provide general habitat enhancement, and, in combination with replacement of some heavily-grazed poor pasture with rough grassland/scrub on new wide verges, it is considered that there are some benefits for breeding birds and reptiles.

CULTURAL HERITAGE

The cultural heritage assessment considered potential effects on archaeology (below ground remains), historic landscape and built heritage (such as listed buildings). A desk and field study was carried out to gather relevant information on known archaeological remains along the route, and on built heritage features such as listed buildings. Assessment for cultural heritage assets includes direct physical impacts on heritage features as well as any impacts on the setting which is important to the way in which historic structures or places are understood, appreciated or experienced.



STAGE 3 DESIGN DEVELOPMENT

Following completion of the Stage 2 Assessment, the design of the Preferred Route has been developed in sufficient detail to allow land to be identified for the construction of the scheme and for the publication of draft Road and Compulsory Purchase Orders. The main aspects developed were: (i) the access to the cemetery (ii) public utilities on the old road, (iii) visibility from the access to the White House, (iv) safety barriers to be provided and (v) preliminary drainage design that meets with the approval of the Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH).



As a result of considering these aspects the following have been included in the design:-

- Divert the services in the existing road to the new road to allow the old road to be landscaped
- Provide a lay-by and footpath link to access the cemetery
- Introduce a viewing area along the footpath to the cemetery
- Provide a safety barrier with high containment on the improved bend
- Provide 3 levels of treatment to the road drainage, including a drainage basin
- Move the new road away from the White House to provide better visibility to and from the access

Development of the design resulted in the scheme described below.

THE PROPOSED SCHEME

The main criterion for the engineering design of the Preferred Route has been the need to improve the operational requirements, as stated in the Scheme Objectives. Consequently the radius and carriageway width has been increased to allow two way traffic at all times and the gradient has been reduced allowing reasonable speeds as traffic negotiates the improved alignment. The design utilises the existing retaining wall supporting the road on the approach to and at the hairpin bend, since any disturbance to this would prove difficult to construct without having to close the road.

The design consists of a 530m long improvement to the existing A9 Trunk Road, with the majority being built off the line of the existing road. As a result disruption to trunk road traffic during construction will be kept to a minimum. Starting at the southern end, some 50m south of the existing hairpin bend, and travelling in a northbound direction, the new alignment bypasses the existing hairpin bend by increasing the radius of the bend to go around the cemetery on the north side, part on a new embankment and part in cut. Once past the north side of the cemetery the alignment straightens out for approximately

100m before entering a right hand bend with a new lay-by introduced on the Left Hand Side (LHS).

The lay-by connects to the entrance to the cemetery with a length of new footpath designed to be suitable for disabled users. It is proposed to include a viewing area at the highest point along the footpath to allow members of the public to stop and take advantage of the views. The proposals for this area also include landscaping of the area between the new footpath and the slope leading down to the existing road, including landscaping of the redundant sections of existing road. The new lay-by will also allow slow moving northbound HGVs to pull over to allow faster vehicles to pass.

North of the lay-by the right hand bend continues, taking the road away from the property known as the White House improving the visibility for vehicles leaving the house, before tying into the existing road north of the White House.

On the LHS below the cemetery, the slope is steepened and reinforced to avoid disturbing the cemetery. On the Right Hand Side (RHS) opposite the cemetery, adjacent to the Berriedale Cliffs, it is anticipated that the design will include a reinforced soil embankment with a piled sub-structure beneath it to ensure long term stability of the new road on such steeply sloping ground. In recognition of the steep slopes at this location, a high containment safety barrier is included around the outside of the replacement bend.

West of the cemetery, the side slopes adopted in the design are more gentle and both the soil and rock slopes will be covered with topsoil and grassed.

Drainage from the new road will pass through 3 levels of treatment prior to discharge into the Berriedale Water with the flows being attenuated through the use of a detention basin to reduce risk of flooding.

In addition to the above measures, safety barriers and fencing will be provided as normal as part of the improvement scheme.

No properties will be demolished as a result of the proposed improvements. In particular, the design has been developed to avoid any alteration to the properties known and the “White House” and “Strathview” which are the closest dwellings to the scheme. The Scheme will require the compulsory purchase of farmland for construction.

ENVIRONMENTAL ASSESSMENT

Environmental assessment work has been ongoing since 2013 and each of the options considered for the A9 Berriedale Improvement were considered in terms of their environmental impact. Based on the substantial amount of environmental information that was collated, it was possible to determine that there would be no likely significant environmental impacts associated with the Scheme and the Environmental Impact Assessment under the Environmental Impact Assessment (Scotland) Regulations, 1999 (as amended) was not required. In addition, it was recognised early in the process that there was a need to assess the impacts on the East Caithness Cliffs Special Protection Area (SPA) and Special Conservation Area (SCA). The East Caithness Cliffs are important for the bird populations and the habitats that support them. A Habitats Regulation Appraisal (HRA) screening assessment was undertaken which determined that there would be no significant impacts on the SPA and SCA provided any rock blasting, piling or vegetation clearance is undertaken out with the breeding bird season.

