



Agenda Item Introduction

ISLE OF WIGHT COUNCIL

Committee	POLICY AND SCRUTINY COMMITTEE FOR NEIGHBOURHOODS AND REGENERATION
Date	2 MAY 2024
Topic	RETAINING THE A3055

Background

1. The Southern part A3055 coastal road is one of the most scenic and beautiful routes on the Island, a tourist attraction, local access and commercial route to and from West Wight
2. The Island has been experiencing the effects of geological erosion on the Military Road (A3055). There are three specific sites - the cliff top along Afton Down, and two sites between Brook and Compton Farm. This has raised many concerns amongst Island residents and other users on the future of the road.
3. The Military Road is the responsibility of the Isle of Wight Council as the highway authority. However, the surrounding land and the land underneath is of mixed private and National Trust ownership.
4. The A3055 through the Undercliff has been closed for ten years and the traffic levels through the narrow lanes at the centre of Niton have raised concerns over public safety.

Focus for Scrutiny

- What is the formal Council position on the two road sections, and the strategy for going forward?
- How does the Shoreline Management Plan interlink with this?
- What work has been done to seek aid from the PFI Highways contract or Government departments for support for mitigation of the Niton issues and preservation and rerouting of the Military Road?
- What is the outline of the emergency management plans in response to a catastrophic failure of the Military Road?

- What lessons have been learnt from the Ventnor issues to enable better communication to residents?

Outcome(s)

5. The committee to put forward a series of recommendations for the relevant Cabinet Members consideration.

Document(s) Attached

Appendix 1 - Brooklands Chine – Realignment Option and site maps
Appendix 2 - Shippards Chine – Realignment Option and site maps
Appendix 3 - Military Road – Realignment Option
Appendix 4 - Military Road Current Transport Assessment March 2024
Appendix 5 - Diversion Route Assessment

Contact Point: Melanie White, Statutory Scrutiny Officer,
(01983) 821000 ext 8876, e-mail melanie.white@iow.gov.uk

Scrutiny Report

ISLE OF WIGHT COUNCIL

Meeting	POLICY & SCRUTINY COMMITTEE FOR NEIGHBOURHOODS AND REGENERATION
Date	2 MAY 2024
Title	A3055 – CURRENT POSITION AND FUTURE STRATEGY
Report of	LEADER AND CABINET MEMBER FOR TRANSPORT AND INFRASTRUCTURE, HIGHWAYS PFI, TRANSPORT STRATEGY, STRATEGIC AND EXTERNAL PARTNERSHIPS

Executive Summary

- The purpose of this report is to provide the Isle of Wight Council's formal position and future strategy for the A3055 including Leeson Road and Military Road and the areas of Niton, Undercliff Drive, Ventnor and Whitwell.
- The content of this report will draw on information from the Shoreline Management Plan (SMP2), the work that has been carried out date by the Isle of Wight Council Transport Strategy Team and Island Roads and emergency management plans in place for a future failure of roads in the area.
- The recommendations of this report if for the committee to note and make comments on the monitoring, collection and evaluation of data from the land surrounding Leeson Road continues to be collected and used to inform decisions on how, when and in what capacity the road will be opened in and which of the options will be taken forward to be developed in a Strategic Outline Business Case for the Military Road in order to bid for future funding from central government or other external sources, to carry out works.

Recommendations

- For the Committee to note the following:
- The current and historical information relating to the respective sites of concern along the A3055.
- the continued monitoring of the data obtained from the equipment installed on the land surrounding the area known as 'The Landslip' on the A3055 - Leeson Road. The data will be used to determine the amount of ground movement happening in the area which will then inform future and timescales for the potential reopening of the road.

- the continued work on developing the outline strategic business case for the future of the A3055 – Military Road to ensure that it can continue to be used as a strategic route on the islands transport network.

Background

The Landslip and the Undercliff

Historically, the Undercliff has remained relatively stable. However, over the past fifty or so years ground movements have increased in frequency at Monks Bay, in parts of Ventnor, St Lawrence and at Bonchurch and Niton. Since the formation of the landslide complex, coastal erosion has gradually and critically reduced the support at the toe of the complex. Ground stability is closely related to groundwater conditions, and recent wet winters have been characterised by exceptional landslide activity. Over the past decade, some major re-activations have occurred at Niton, St Lawrence and Bonchurch.

The area known as 'The Landslip' is located at the eastern end of the Undercliff between Luccombe and Bonchurch, above a 30-40-metre-high sea cliff and rises to 120 metres above sea level. Records show that the earliest landslide was recorded in the area in 1810, with further landslips recorded in 1995, 2001 and 2023.

The Leeson and Whitwell Roads are at an elevated location on top of the greensand bench behind the relic landslide systems, and as such are not subject to the severity of the same geological risks as Undercliff Drive. Nonetheless, the recent reactivation of the landslide in Bonchurch has been a significant event that has affected fourteen hectares of land and has caused the failure of some of the greensand bench that Leeson Road sits upon.

A major landslide took place in the same area in 2001 which resulted in the decline and failure of the rear scarp and recession of the Undercliff towards the A3055 Leeson Road and nearby properties. As part of the 2001 ground investigation following the landslide, a programme of instrumentation and monitoring was established in the area.

This included 3 deep boreholes, horizontal wire-extensometers, crack-meters, tilt meters, permanent ground movement markers, survey control points, an inclinometer, in borehole 2 and piezometers in boreholes 1 and 3.

There are records dating back to 2001 for a piezometer installed in borehole 3, a horizontal wire extensometer installed at Devil's Chimney and the tilt meter located near borehole 3.

Island Roads have produced annual ground monitoring reports between March 2014 and March 2023 and continue regular inspections and monitoring in these areas.

The latest landslide took place in the evening of 10th December 2023. Prior to the landslide there were little outwardly visible signs of ground subsidence around The Landslip. The land is mainly grassland and relatively even. There were some 'J' shaped trees growing at an angle from the steep slope and some uneven ground. The surface of Leeson Road and the pavements were in generally good condition with no obvious signs of recent cracking.

The landslide affected the same area as the 2001 landslide but extended further east towards the A3055 and nearby properties. It covered a total area of 11 hectares and up to 16.5 hectares including the area of debris at the bottom of the cliffs.

This landslide was significant in both size and material loss and was unique because there was not only the reactivation of the ancient landslide complex but has also led to block failure in 'new geology'. The new rear scarp is within 10m of the highway at the closest point. This dramatic loss will mean the demolition of three properties, and it is anticipated

that there will be some smaller falls at the southern edge of the back scarp as this deep-seated failure settles.

Following the landslide, the Isle of Wight Council and Island Roads commissioned two independent expert reports including recommendations from Jacobs who looked at the whole landslide event and Atkins who focussed on the impacts on the Leeson Road. The outcome of those reports was that the likely factors that contributed to the landslide were:

- A loss of slope support caused by the 1995 and 2001 landslides.
- Coastal erosion.
- Unusually high levels of rainfall leading to high level of groundwater and run off.

Both reports clearly recommended that Leeson Road should not be reopened until new and additional monitoring systems have been installed, and sufficient data is available to determine the extent of ongoing land movement. It was also recommended that early warning systems are installed with the ability to close Leeson Road at short notice if required.

Until there is sufficient data available to provide comfort on the level of risk of a future landslide in the same area, there is no guarantee that further movement wouldn't take place when the road is open and being used by the public.

With the closure of Leeson Road, all the traffic in the area is being diverted along the B3327 through Wroxall. The council is aware of the problems that residents and visitors who are living, working and travelling in the area are experiencing due to the increased congestion and journey times and the need for additional safety measures to be put in place along these routes.

The council in conjunction with Bob Seely MP are putting forward the case for additional funding to be allocated from DfT for the long-term ongoing monitoring of the area and for constructing safety upgrades to the diversion route if the closure remains in place in the long term. This decision is currently being reviewed by a transport minister. The council continues to be in close contact with DfT to emphasise the importance of a swift decision to ensure the future transport resilience of this area of the Isle of Wight.

Undercliff Drive

Input previous info

Military Road

In 2010, two reports were taken to the Cabinet of Isle of Wight Council with decisions on the future of Military Road. The first report concluded that further consultation and optioneering was needed especially in relation to Brook and Hanover Point and the second recommended sustaining the road in current alignment for as long as possible with drainage options.

Following the installation of drainage systems, the road at Brook was reopened to two-way traffic in 2014. Shortly after this the Shoreline Management Plan (SMP) was introduced, and this has since been reviewed in 2020. The SMP is a set of policies relating to investment in coastal defences to prevent coastal erosion and flood risk using guidance from the Environment Agency (Defra). The cost of defending the coast should be less than the loss of property, economic land use, ecological conservation and historic assets within the plan period, 100 years from 2010.

Repairs to the current sites would be a short-term solution, with potentially between 2-10 years of useful life as the coastal erosion is accelerating in pace and taking place on both the landward and seaward sides of the cliffs.

A favoured long-term solution would take account of the natural chine formation and coastal erosion would be to reroute the road inland across land owned predominantly by the National Trust.

The council and Island Roads are working to develop a strategic business case to examine this option in more detail. The recommendations will be included in future works in the Isle of Wight Council Local Transport Plan 4. Delivering this scheme will also require significant central Government funding of approximately £25 - £30 million. Referencing this in recognised policy documents such as the Isle of Wight Council Local Transport Plan 4 will strengthen the case for obtaining Government funding to deliver this scheme.

Current Situation

The Landslip and Leeson Road

Since the landslide, the Isle of Wight Council and Island Roads have been working swiftly and proactively, engaging with technical experts to agree and implement the recommended extended monitoring program for the stretch of Leeson Road potentially affected by the December landslide event.

Inspections of the road started as soon as possible after the landslide, with Island Roads carrying out level surveys and twice weekly walked inspections since December 2023 to start building the picture of the amount of ground movement in and around the landslide area that could take place.

A monitoring plan has been agreed between Island Roads, their consultant, Atkins and the specialist installation company. This includes 22 tiltmeters to measure the angle of the slope of the ground; 3 extensometers to measure changes in the shape of the ground and 3 Global Navigation Satellite Systems which will remotely monitor all the measuring devices in real time and will be used to inform any early warning system.

The locations of the monitoring equipment are based on the recommendations in the Atkins report commissioned by Island Roads. The necessary access arrangements have been made to ensure that monitoring equipment can be installed on private wherever necessary.

The installation of the monitoring equipment took place in the a/c 15th April, now that the equipment has been installed and tested to ensure that it is working correctly, the data can start to be collected and analysed.

The data will indicate the stability of the ground over time. The ideal situation would be that there are continuous readings of little or no movement. This data will be used as a key part of the discussions about reopening the road either fully or partially for pedestrians and cyclists. If the data shows that there is still movement surrounding the landslip, then the monitoring will continue to start to establish a long-term pattern. Isle of Wight Council and Island Road will continue to work with specialist technical consultants to ensure that the data is interpreted accurately and used appropriately to ensure that the right decisions are taken.

Military Road

A Military Road working group was established in February 2024 with representatives from the Isle of Wight Council and Island Roads.

The first meeting of the group looked at the following options for Military Road at two distinct places along the route:

1. The localised realignment of BrookChine (Site 14) – this would be the construction of approximately 3,620m² of new road with an indicative build cost of £2.2 million. The plan is attached as Appendix 1 of this report.
2. The localised realignment of Shippards Chine (Site 15) – this would be the construction of approximately 5,225m² of new road with an indicative build cost of £3.2 million and a £500,000 drainage contingency. The plan is attached as Appendix 2 of this report.
3. A full realignment of the Military Road – this would be the construction of up to 16,860m² of new road with an early indicative build cost of £10.2 million and a £1.5 million drainage/ground risk contingency. The plan is attached as Appendix 3 of this report.

The costs given above are for construction only and do not include design, planning, consultation, and land purchase costs. Costs are based on the most efficient solutions – e.g. full closure of the existing road during construction to allow the old road to be excavated and recycled into the base layers of the new road therefore reducing material import / disposal costs. Drainage and ground conditions are not known across this area at this stage and would require surveys in order to current situation.

A transport assessment has also been produced to work alongside the realignment options and assist officers and members to make recommendations and an informed decision about which of the above options is the most technically and environmentally appropriate and economically viable for the long-term future of the area. These are included in Appendices 4 and 5 of the report.

The working group will meet again (date) to work through the options in more detail and make the recommendation to the council

The preferred option will be developed into an outline strategic business case to be submitted for Government funding through the Department for Transport (DfT) and the Department for Levelling Up and Communities (DeLUHC).

Communications

There is a dedicated e-mail address for resident enquiries about the landslide, the closure of Leeson Road, and the wider road network in and around Ventnor this is coastal.recovery@iow.gov.uk

This inbox will be monitored, and residents may be asked to refer to website if the information they require is already available. Any new information will also be added to the website if it is appropriate.

There will be a dedicated website page on both the council and Island Roads website, this will be updated as soon as there is new information and will also include regularly updated frequently asked questions to reflect the current situation.

The links to the website pages are:

[Leeson Road landslip FAQs \(iow.gov.uk\)](http://iow.gov.uk)

[Island Roads | Leeson Road and Ventnor accessibility](#)

Isle of Wight Council and Island Roads will continue to hold the regular Ventnor public meetings for both coastal and highways updates. New information will be shared via presentations and to allow residents to attend, obtain further information and ask questions to representatives from both organisations.

Future Catastrophic Events

A response to a catastrophic failure, including the need for an evacuation would be managed through the arrangements defined in the Council's [Emergency Response and Recovery Plan](#) and the Island's Multi-Agency Evacuation Arrangements. This would ensure a co-ordinated approach across both the Council and that of partner agencies

Appendices Attached

- Appendix 1 - Brooklands Chine – Realignment Option and site maps
- Appendix 2 - Shippards Chine – Realignment Option and site maps
- Appendix 3 - Military Road – Realignment Option
- Appendix 4 - Military Road Current Transport Assessment March 2024
- Appendix 5 - Diversion Route Assessment

Background Papers

- Jacobs – The Landslip (Bonchurch): Site Inspection and Recommendations – Document no: B2475000-01
- Island Roads - Clause 12.11 Failure Report Amber Site 1 Leeson Road Ventnor
- Island Roads – Leeson Road Initial Monitoring including Permission Schedule
- Shoreline Management Plan - [Plans and strategies \(iow.gov.uk\)](#)
- Isle of Wight Council – Committee Report – Paper 1 – Tuesday 30th March 2010 – Military Road A3055 (options)
- Isle of Wight Council – Committee Report – Paper B – Tuesday 12th October 2010 – Military Road A3055 (options)
- Geotechnical Study Area G10 – Afton Down near Freshwater, Isle of Wight, UK
- Isle of Wight Council Emergency Response and Recovery Plan - [Directorate of Environment and Neighbourhoods \(iow.gov.uk\)](#)

Contact Point:, Michelle Love, Service Director for Highways and Community Protection ☎ 821000 e-mail michelle.love@iow.gov.uk

COLIN ROWLAND
Director of Communities

CLLR PHIL JORDAN
Leader and Cabinet Member for
Transport and Infrastructure, Strategic
and External Partnerships