REGULATION 29 RESPONSE TO PREVENT FUTURE DEATHS

THIS RESPONSE IS BEING SENT TO:

The Area Coroner for Hertfordshire, Jacques Howell of The Old Courthouse, St Albans Road East, Hatfield, Hertfordshire, AL10 0ES.

1 RESPONDING AUTHORITY

National Highways Limited is the government owned Strategic Highway Company appointed by the Secretary of State for Transport as highway authority for the Strategic Road Network in England including the M1 motorway in Hertfordshire.

I am Head of Service Delivery within Operations South-East at National Highways, Bridge House, 1 Walnut Tree Close, Guildford, GU1 4LZ and the operation of this part of the M1 falls within my remit.

I would wish to take this opportunity to express my condolences, and those of everyone at National Highways, to the family and friends of Mr Reilly and Miss Cox.

2 CORONER'S MATTERS OF CONCERN

The **MATTERS OF CONCERN** are as follows: –

Along this section of the M1 southbound there are safety barriers to the nearside of the carriageway. The safety barrier is designed to prevent a vehicle from leaving the carriageway – the idea being that a vehicle that has lost control will continue along the safety barrier before coming to a more controlled stop, thereby minimising the risk of serious injury of death to passengers.

The provision of barriers is particularly important when a high-speed carriageway (such as a motorway) is lined with established trees, as is the case here. This is because any vehicle that has lost control and leaves the carriageway is likely to do so at high speed and collide with these established trees. This would likely lead to a very sharp and sudden deceleration, and may cause the vehicle to overturn, which significantly increases the likelihood of serious injury and death to passengers.

At the collision scene in this case, safety barrier is present shortly before and shortly after the collision site. In general, gaps are sometimes inserted into the safety barrier for the purposes of access or due to the presence of other safety measures (e.g. a grassed bank). The witnesses from the Roads Policing Unit could not offer any explanation for why there is a gap in the safety barrier at this location.

There is a gap in the safety barrier at this location, which for the reasons outlined above gives rise to a risk that future deaths may occur.

3 PURPOSE OF NOTE

This note has been prepared in response to a Regulation 28 report, received from the Hertfordshire Coroner's Service by National Highways on 18 July 2025, in response to a fatal road traffic collision

on 1 April 2024. The incident occurred on the southbound carriageway of the M1 motorway between junction 6 and 5 near Marker Post 30/0B.

National Highways was not an Interested Person in the inquest and was not asked to provide any witness evidence at the inquest. To assist therefore, this note also sets out relevant background information pertaining to the matter raised by the coroner.

3 RELEVANT BACKGROUND INFORMATION

Nature of the current barrier provision at the material location

The M1 motorway between junction 6 and 5 is a conventional 3 lane motorway comprising of 3 lanes and a hard shoulder. The section of motorway was first open to traffic on 2 November 1959.

This section of motorway has a vehicle restraint system (VRS) continuously within the central reservation. In the verge, VRS is provided intermittently to reduce the risk of road users colliding with physical roadside infrastructure such as road signs, technology equipment and other roadside hazards.

There is a section of VRS which ends approximately 50m north of the incident location in front of some steps leading down an embankment. There is a further section of VRS starting approximately 210m to the south of the incident location in front of an electronic message sign. There is a gap of approximately 260m between these two sections of barrier.

At this location there is 1.5m wide level verge immediately adjacent to the hard shoulder. Beyond this area the verge slopes down to the motorway boundary fence which, at the incident location, is approximately 7m from the edge of the hard shoulder. Within this area there is no physical infrastructure but there are a number of small trees between the fence and the edge of the hard shoulder.

Standards Relating to Provision of Vehicle Restraint Systems

Vehicle Restraint Systems (VRS) such as roadside barriers are designed to contain and redirect vehicles in a controlled manner and are installed to reduce the risk of collision with roadside hazards. They are typically designed and tested based on a vehicle of 1500kg, striking the barrier at an angle of 20 degrees at 70mph. If these parameters are exceeded the barrier is likely to be breached by the vehicle.

VRS themselves present a level of injury risk to road users and are therefore only installed in locations where a hazard cannot be removed, relocated, or made frangible, and the level of injury risk from the VRS is lower than the level of injury risk posed by the hazard located behind the VRS.

VRS also require installation, inspection, maintenance, repair and removal, all of which present a level of risk to our roadworkers, but also to the travelling public whilst temporary lane closures and speed restrictions may be in place to undertake such works.

National Highways' current requirements for VRS are contained within the document CD 377 – Requirements for Road Restraint Systems. These were first published in March 2020, with the latest revision (revision 4) published in January 2021

(https://www.standardsforhighways.co.uk/search/1fe48581-82ba-4b6f-95a1-ee93309bd1b5).

The standard sets out a risk-based approach to the provision of VRS using an analysis tool known as the Road Restraint Risk Assessment Process (RRRAP).

CD 377 is normally only applied where a new hazard is introduced on the verge or when the road layout is altered to bring traffic closer to hazards in the verge. As with most new highway standards, there is no requirement within CD 377 to review and upgrade existing highways where there are no alterations being made.

Sections of highway which have not been altered for many years, including the M1 at this location, would have VRS provided to an earlier standard which set specific criteria for the provision of verge barrier based on the nature of physical items in the verge, and the height of any embankment.

A gap in the VRS was left along this section probably due to the absence of physical infrastructure in the verge at this location and the relatively small level difference between the highway and the adjacent land.

At junctions or emergency access points, gaps are left in VRS for access purposes. Where access is required, two sections of barrier would overlap with the section of upstream barrier placed closer to the carriageway edge to prevent vehicles striking the end of the downstream VRS.

The current standard (CD 377) requires gaps of less than 100m to be closed unless there are significant cost, technical and/or access requirements for the gap to remain open. As the gap between the two lengths of barrier at the incident location is 260m this part of the standard does not require this gap to be closed.

Risk Management Approach

Current standards for VRS provide a hierarchy of controls for hazards in the verge. This advocates, that where possible, hazards are removed from the verge in preference to a VRS being provided.

Where vegetation is the only potential hazard in the verge, the risk of vehicles colliding with trees is managed through a programme of tree removal work. Where there is no VRS present we remove any tree within 5m of the carriageway edge. There is a cyclical programme of verge tree clearance that aims to ensure that trees close to the carriageway are regularly removed. Prior to the incident on 1 April 2024, trees at this location were last cleared on 19 February 2024.

Whilst we would not upgrade VRS to current standards as a matter of course unless we were undertaking substantial work at a location, we monitor the safety performance of our network and, based on this analysis, bring forward proposals for safety improvement. This may include providing additional safety barrier to current standards where a high risk of vehicles leaving the carriageway has been identified.

Our monitoring of the M1 had not, prior to this incident, identified a significant trend of vehicles leaving the carriageway at this location.

5 ACTIONS TAKEN

On 17 February 2025 we undertook routine clearance of trees within 5m of the carriageway edge along this section of the M1.

4 PLANNED ACTIONS

We will undertake the Road Restraint Risk Assessment Process (RRRAP) in accordance with the requirements of CD 377 to assess the need for VRS, or other mitigations such as additional tree clearance, at this location based on the current technical standards.

5 TIMETABLE FOR PLANNED ACTION

We will complete the planned action before 31 December 2025 and report on our findings to you no later than 13 February 2026.

6 Signed and dated

9th September 2025