



WORKING AREA – INSUFFICIENT WIDTH TO SAFELY UNDERTAKE WORKS

WLD.013

Description of Event

Vehicle operating within barrier safety zone and soft verge edge due to insufficient working width.

Population at Risk

Construction Workers, Maintenance Workers and Road Users

Hazardous Activity and Residual Risk Description

- Vehicle driving close to barrier within working width.
- Vehicle operations with nearside wheels on soft ground (verge) has an assessed residual risk of a likely likelihood of major harm.
- Vehicle driving at top of slope with no edge protection.

Potential consequences of this event

- Vehicle is at risk of overturning which could result in plant operative and or ground workers in the vicinity being injured.
- VRS will not perform as expected in the event of a collision.
- There is high potential for serious injury due to plant operating within the barrier deflection Safety Zone.
- The residual risks require the working width requirements to be adhered to.

Safety Hub [Alert Database](#)

- Category vehicles with sub-category 2 overturning has 14 alerts including 1 with injury and 1 with a fatality.
- Sub-category 1 MOP vehicle, Lorry Loader cranes and x - Misc with sub-category 2 collision, competence and uncontrolled plant movements with a text filter for alerts containing "VRS" has 3 alerts.

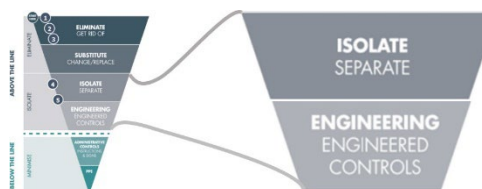


Photo of vehicle within 600mm Safety Zone of VRS barrier.

Potential Mitigation Measures

Design

- Confirm that there is sufficient working width available. If not, potential to request land for temporary works to facilitate additional working area.
- Allowance for barrier Safety Zones and edge protection must be considered at all times.
- Working at night could be considered, to allow increase in extents of lane closures, increasing available working width. Direct and indirect network impacts on safety will need to be factored in, in respect to setting up of the TTM, potential traffic congestion and side road impact.
- BIM and other digital solutions to be used within the design process to check how the size of plant will operate safely within the area.



Construction

- Potential provision of edge protection at crest of embankment to ward haulage drivers away from vulnerable edge.
- Identify appropriate working width constraints to the available carriageway and provide it.
- Use alternative plant, e.g., tracked dumpers.

Maintenance / Operations

- Similar considerations to the above should be considered for maintenance works e.g., widening or drainage operations.
- Update existing maintenance traffic management plans.

Further Guidance and Reading

- [RtB 1 – Plant and Equipment](#)
- [RtB 2 – Plant Person Interface](#)



Please send ideas for Whole Life Design safety shares to wellbeing@nationalhighways.co.uk

LEAN

Alternative
Materials

Alternative
Plant

Improved
end user
benefits

Reduced
Reportable
Accidents