



Description of Event

Change in installation of asset not communicated to design team or maintainer. Resulting subsequently in a train being derailed and causing the death of three people and the injury of three others.

Population at Risk

Construction Workers, Maintenance Workers and End Users

Hazardous Activity and Residual Risk Description

- The Principal Contractor did not install a drainage ditch in accordance with the design and then failed to inform the designer or supervisor of the changes; or inform the maintainer to ensure safety related as-built information was transferred and available, as required under CDM.
- Failure of asset due to use of an unapproved material and arrangement giving a residual risk of an almost certain likelihood of extreme harm.

Potential consequences of this event

- Designs go through many iterations to ensure they will be as safe as possible when installed in accordance with the specification. Changing the material and form of the drainage trench, without approval, or retention of adequate records, caused the asset to fail due to increased erosion, leading to rapid material wash out and a catastrophic accident.
- The residual risk requires assets to be installed as per the design, with any changes to the design being fully agreed with the design team.

Safety Hub Alert Database

- Filtering by text “landslip” has one safety alert with injury to members of the public.
- Filtering by text “CDM” and filtering out “N/A” in incident / injury classification has one safety alert with a fatality.

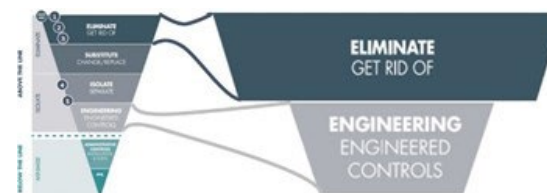


Debris covering track as erosion issues were exacerbated by the incorrect installation.

Potential Mitigation Measures

Design

- All designs should be produced by designers with the correct skills, knowledge, experience and training.
- Changes to any design should always be approved.
- Designers should always be provided with suitable preconstruction information.



Construction

- The CDM Regulations should be followed at all times.
- Where site-based amendments are made to a design, they should always be communicated to a competent designer for approval.
- Any changes should be highlighted in the as-built drawings and residual risk register to assist with future asset maintenance.
- All design changes should always consider future maintenance requirements and the fact they could result in different inspection regimes being required.

Maintenance / Operations

- Refer to as built drawings and residual risk register within the H&S File to ensure that maintenance inspection proposals are suitable and sufficient.
- Should maintenance personnel identify any discrepancy with the asset information, this should be reported back to the client.

Further Guidance and Reading

- [L153 – CDM \(2015\) Guidance](#)
- [RtB 26 – Safety by Design](#)



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

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Reduced
Labour

Improved
end user
benefits

Reduced
Activity
Duration

Reduced
Defects

Reduced
Reportable
Accidents