



Rail Accident Investigation Branch

PWI Earthworks and Drainage Conference, 8 November 2023

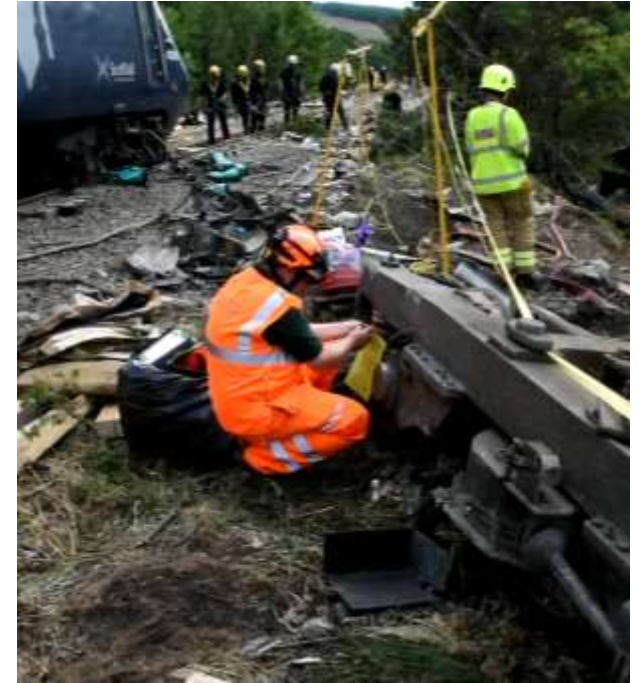
## **Learning from Carmont**

Derailment of a passenger train at Carmont near  
Stonehaven, Aberdeenshire, 12 August 2020

Nick Bucknall CEng MICE  
RAIB Inspector

# About the RAIB

- Active since 2005
- Covers main line, heritage, trams, Channel Tunnel
- Independent from all parts of the rail industry
  - part of the Department for Transport
  - entirely independent in the way we investigate
- Sole purpose to improve safety
  - we do not apportion blame or liability



This presentation will only be able to discuss things which are covered by the RAIB's report as the legal process has not yet concluded

# Carmont, Aberdeenshire

12 August 2020



Image: M Davidson





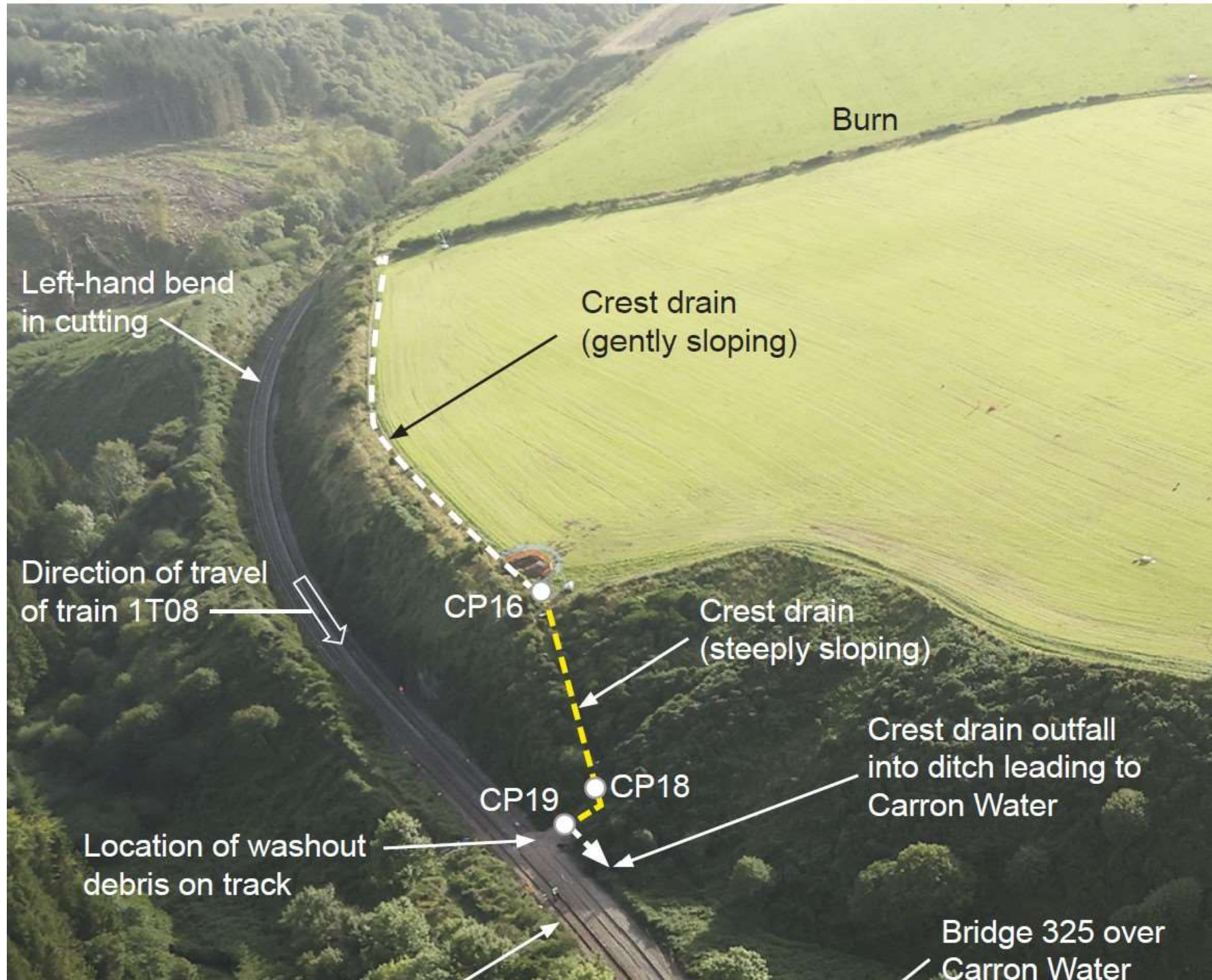
## Rail Accident Report



Derailment of a passenger train at Camont,  
Aberdeenshire  
12 August 2020

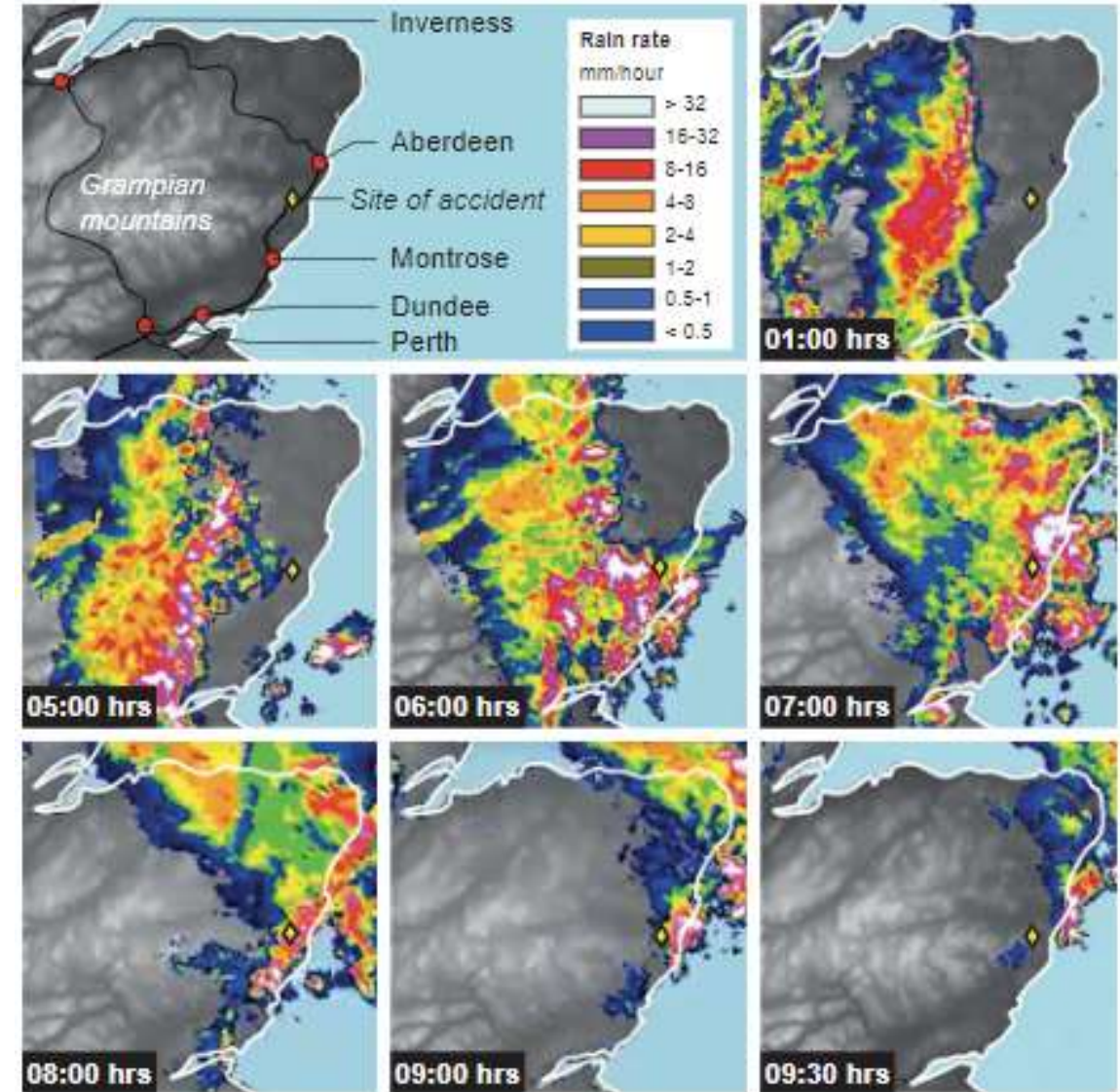
Report 62/2022  
March 2022

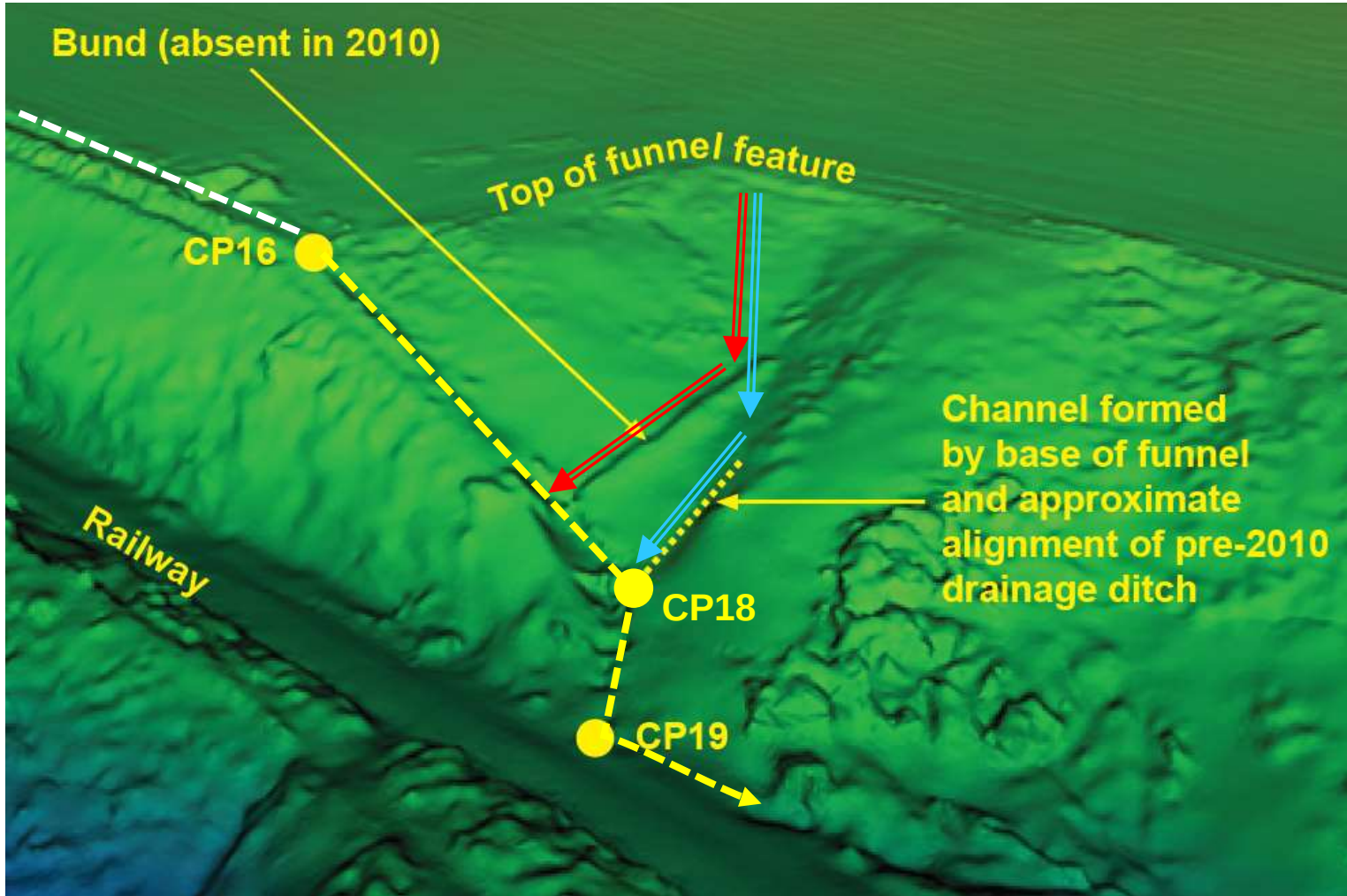
Image: RAIB





The weather – a rainfall event that could be expected at that location once in 100 years





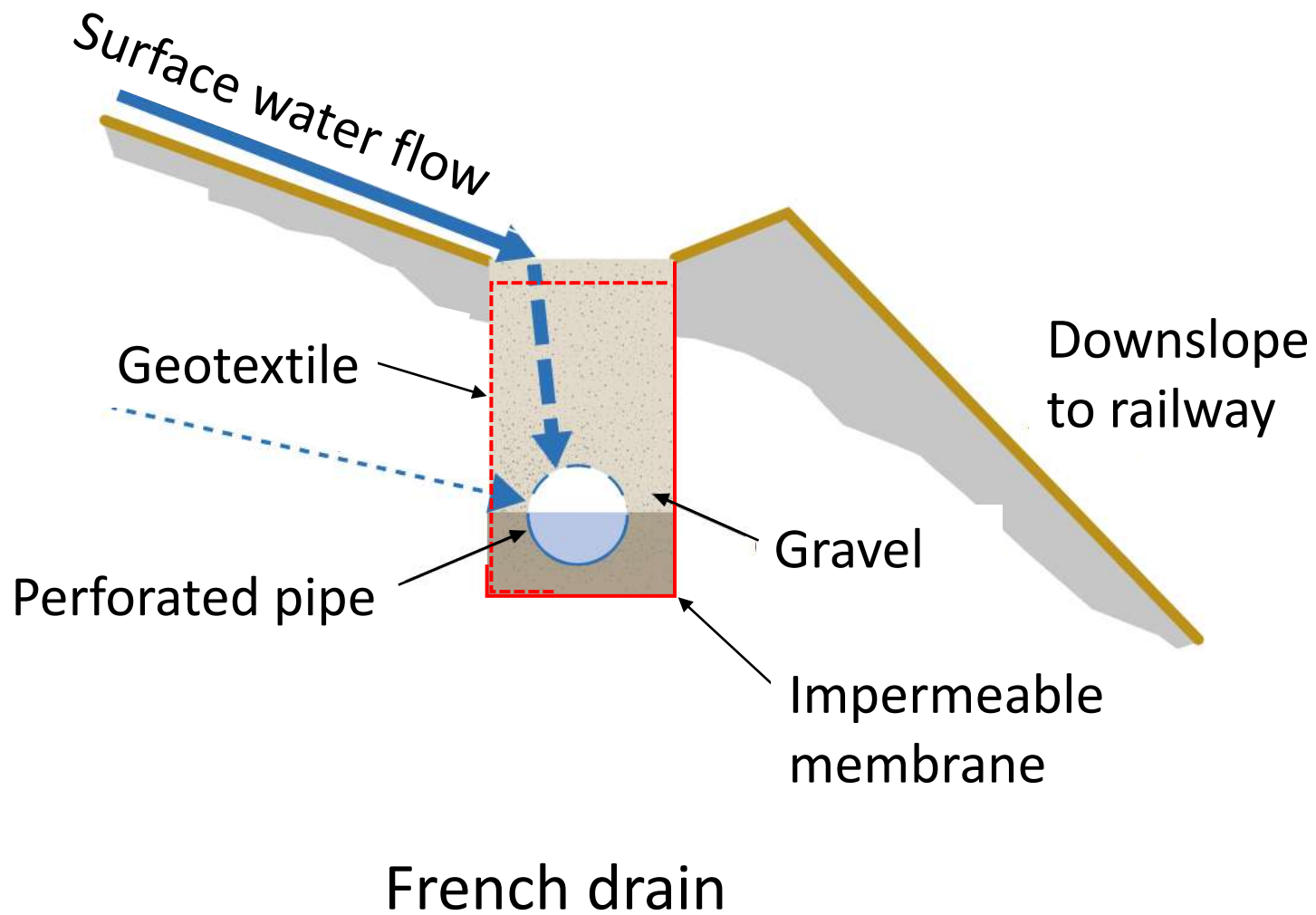
Site topography from LiDAR data

## Infrastructure

The drain was not installed as designed



Bund (was hidden by gorse)

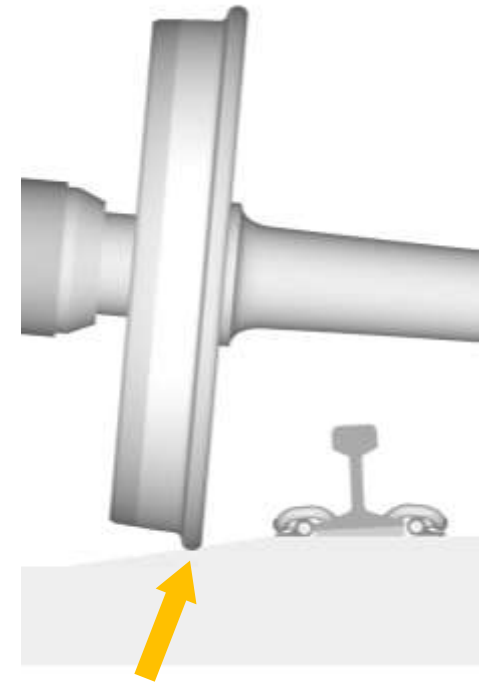
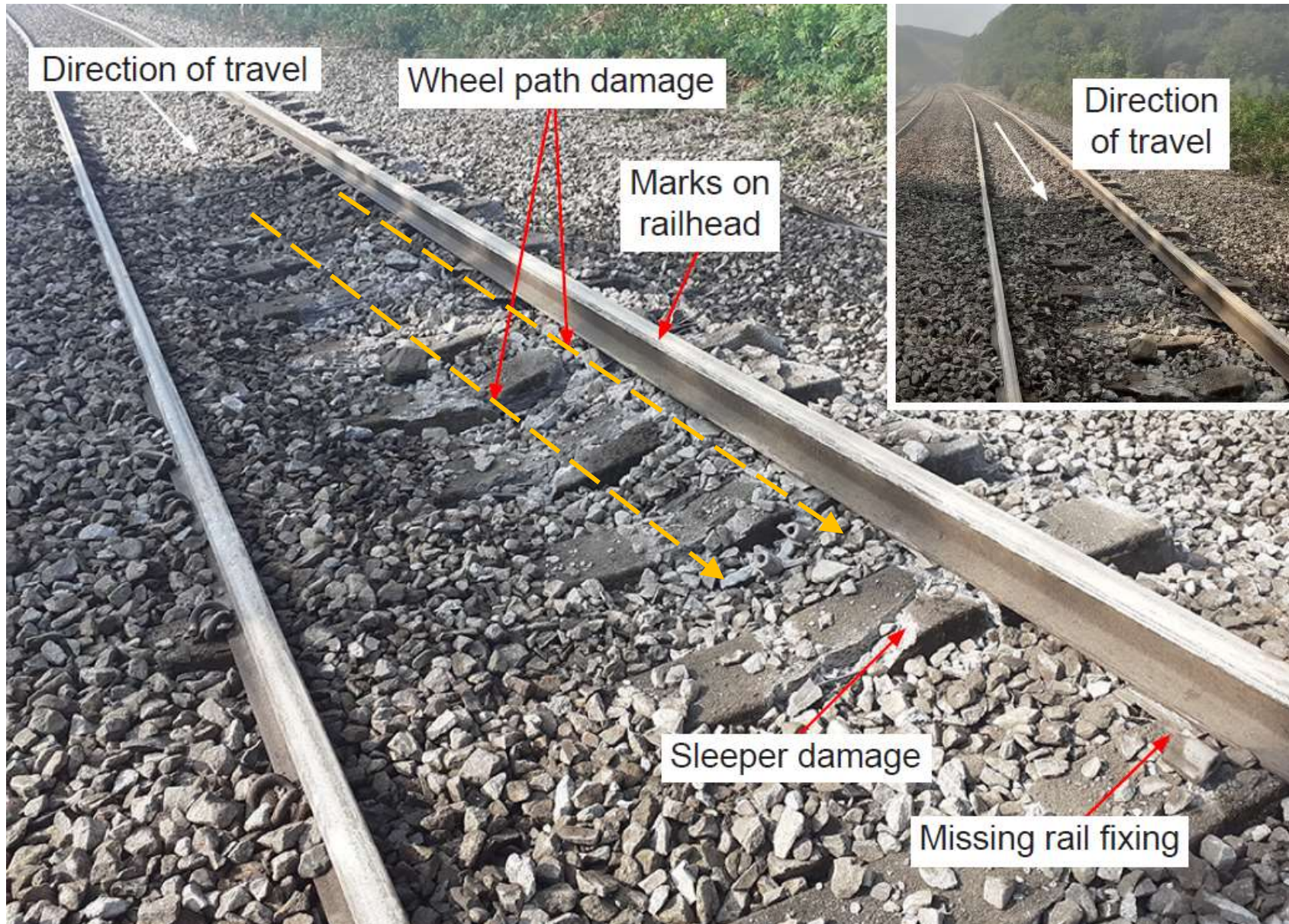


The drain's geotextile lining was omitted in the area of the washout

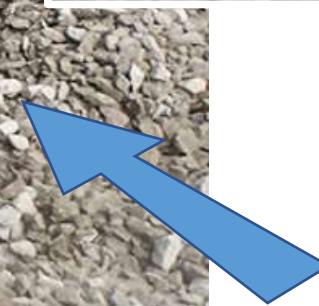


## Operations

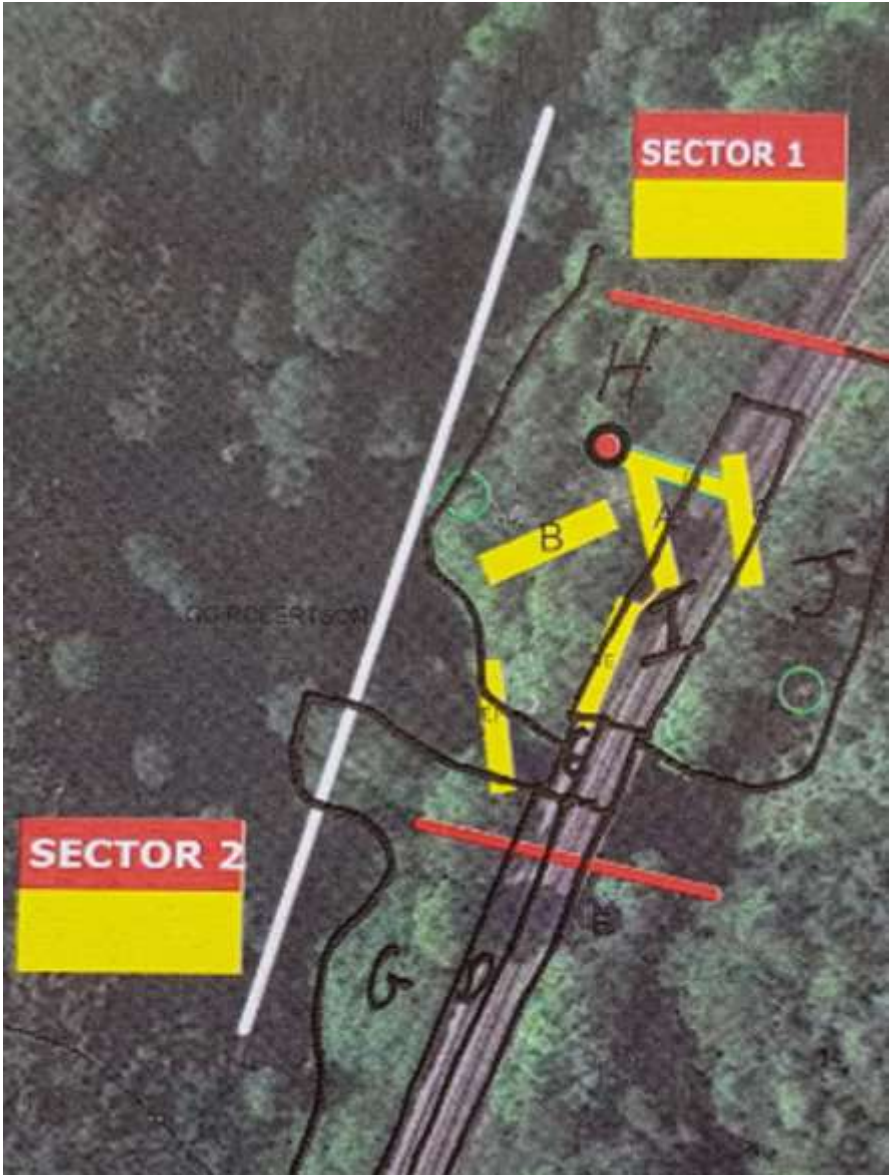
The speed of 1T08 was not restricted



Derailed wheelset







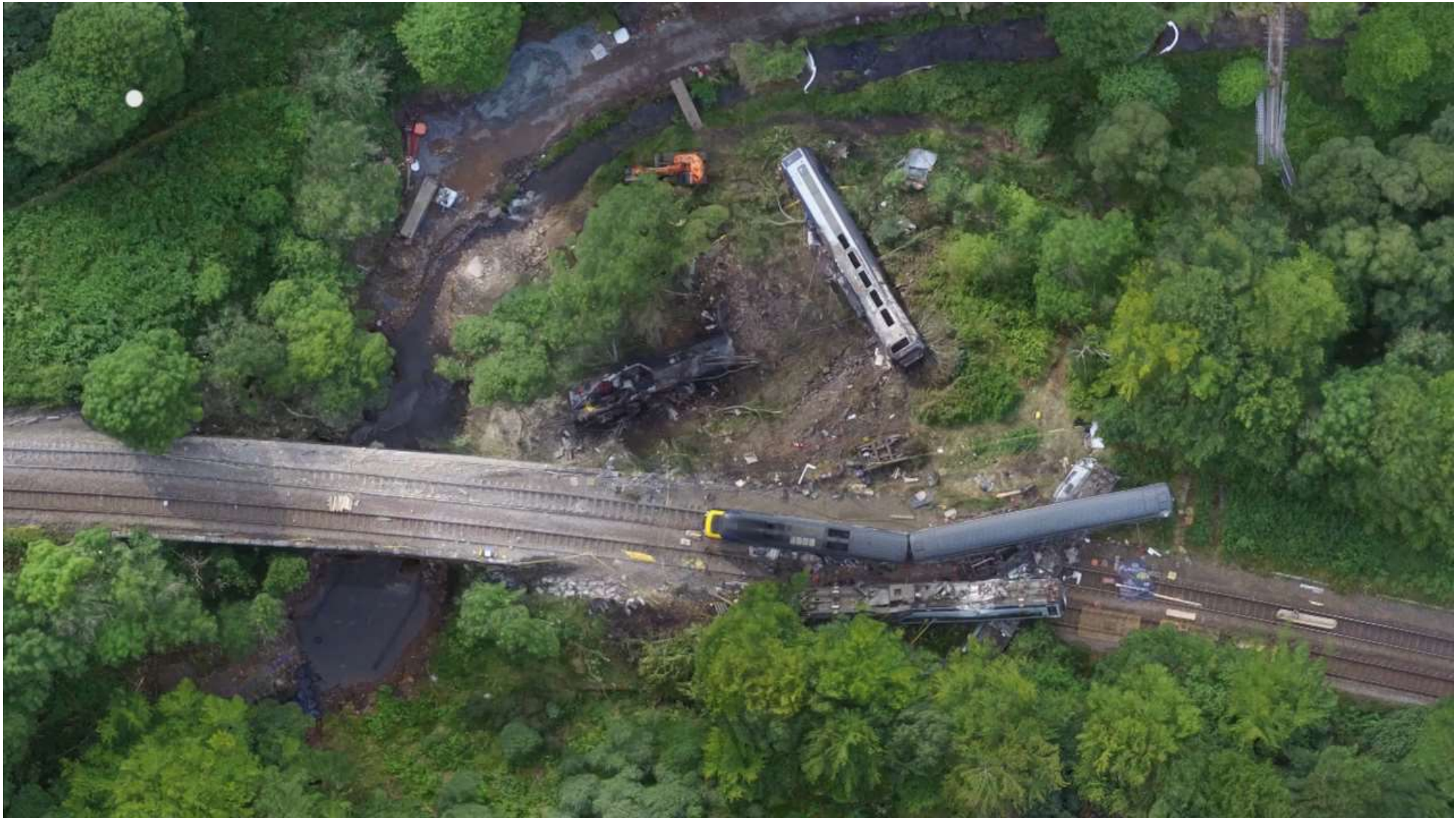






# Crashworthiness





Computer modelling was used to assimilate evidence



