



The
Geological
Society

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South East Regional Group

Meeting

Date: 11 February 2020

Location: Atkins, 16th Floor, ONE Croydon, 12-16 Addiscombe Road, East Croydon, CR0 0XT

18.00 for 18.30 start



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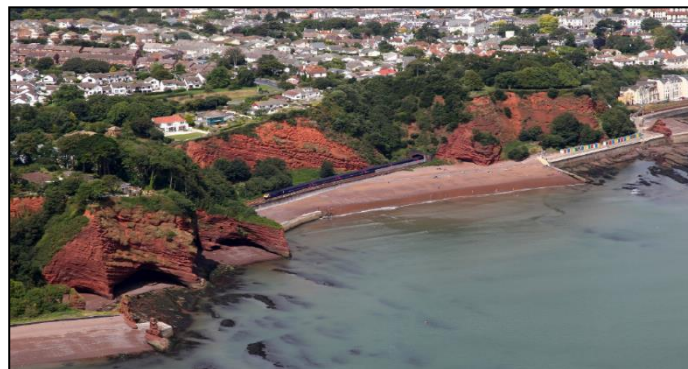
Stability of the Teignmouth Sea Cliffs: The Past Present & Future

By Tim Laverie, Network Rail



Network Rail's Western Route extends from Paddington to Penzance and follows the Welsh border as far north as Worcester. Over this section of England, the railway infrastructure is supported by a myriad of individual assets and asset systems; including 2,278 track miles, 3,292 bridges, 757 level crossings and 18,172 earthwork assets. However, none of these asset systems are more prominent or iconic than the coastal setting which forms Network Rail's Great Western Mainline between Dawlish and Teignmouth Stations, located in South Devon.

The railway in this location was engineered by Isambard Kingdom Brunel and commissioned into use in 1846. Over the course of its 174year history several significant earthwork failures have occurred, causing the railway to be closed for prolonged periods of time. Via the use of case studies, the past stability of the Teignmouth sea cliffs and the effects of failure events on the operational railway will be explored. The current asset management plans and procedures used to mitigate the present-day railway from earthwork failure, via remote condition monitoring, operational restrictions and interventions works, will be detailed. Finally, plans to ensure the long-term resilience of the railway line from future degradation of the sea cliffs will be outlined.



Biographical Details: Tim is a Chartered Geologist and currently the Director, Route Asset Management for Network Rail's Western Route, responsible for leading a multi-discipline asset management organisation that delivers sustainable levels of asset integrity and performance to meet their customers' requirements. He joined Network Rail in 2013 and has had the opportunity to experience a number of positions within the Asset Management directorate and the wider business; specifically, within Operations Delivery.

Prior to joining Network Rail, Tim worked for the preceding eight years in a range of multidisciplinary engineering businesses, focussing on civil engineering projects associated with a wide variety of sectors, including the Railway Industry.

Please let us know if you plan to attend so that we have an idea of numbers for catering -

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