Risk Assessment - Frequency of Tunnel Inspections

Reference No: STR-44482-59
Version No: 3
Assessment Approver: Kevin Jarvis

Department: Infrastructure
Date Of Assessment: 13 October 2021
Review Due Before: 02 January 2030
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Detailed inspection of tunnel internal construction

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Tunnel structural failure Inspection frequency too long to pick up any new faults or failures	Everyone	1) CRITICAL - Engineering: Visual inspections will continue to still be carried out every year - Effective 2) CRITICAL - Engineering: PW trackwalkers are present at least every month and will report any new issues - Effective 3) CRITICAL - Engineering: Trains travelling through tunnels are a comparatively low weight. - Effective 4) CRITICAL - Engineering: There are no hidden or supported shafts in the tunnels - Effective 5) CRITICAL - Engineering: There are no known significant tunnel defects - Effective 6) CRITICAL - Engineering: There are no significant water incursions - Effective 7) CRITICAL - Engineering: External tunnel loadings above the crown are light due to the majority of land above being for farming and the height of land above the crown being 12m+ - Effective 8) CRITICAL - Engineering: Detailed tunnel inspections began in 2006 and have revealed no significant faults or issues - Effective 9) CRITICAL - Engineering: Detailed inspections were carried out in 2021 (Greet Tunnel) and 2024 (Hunting Butts Tunnel). - Effective 10) CRITICAL - Engineering: Tunnel portals will be inspected every 6 years and bores every 4 years in line with NR_L3_CIV_006-4A - Effective 11) CRITICAL - Engineering: A detailed inspection of Greet Tunnel will be carried out in late 2025 and a similar inspection of Hunting Butts Tunnel is scheduled for 2028. - Effective 12) CRITICAL - Administrative: Network Rail Standard (NR_L3_CIV_006-4A - Examination of tunnels) will be followed. In particular the appendices that refer to assessment of risk based on construction, condition and use etc.. - Effective 13) CRITICAL - Administrative: Tunnels are only used by trains at a maximum speed of 25mph. - Effective 14) CRITICAL - Administrative: Tunnels have low usage due to the nature of the traffic/business - Effective 15) CRITICAL - Administrative: The tunnels can be classed as 'lower' risk in NR_L3_CIV_006-4A due to the bore being lined with masonry, type and frequency of rail traffic, no history of ground movements, inaccessibility to the public, remoteness to other structures, low risk of impact and no outstanding or ineffective remedial works - Effective	1 x 4 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	None	1 x 4 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Reference Documents

• Network Rail Standard for Examinations of Tunnels - NR_LV3_CIV_006_4A

Ends

Appendix



Reference: UI-44482-393
Greet Tunnel -



Reference: UI-44482-400
Hunting Butts Tunnel -