Serious incident at Trewern Mill user worked crossing

Scope: Network Rail line managers, safety professionals and accredited contractors

Ref: NRX20-07

Date: 07/10/2020

Location: Trewern Mill, Wales

Contact: Matthew Lupton, Principal Engineer

Overview

At 13:53 on 20th July a signaller at Whitland signal box received a request to cross the line from users at Trewern Mill user worked crossing. The signaller checked the box diagram as a train was in the area. The signaller saw that the track circuit where the level crossing was shown was clear and the next track circuit showing occupied. Believing the train had already passed Trewern Mill UWC, the signaller had already given permission for the user to cross.

At 13:56 the user contacted the signaller to confirm they had crossed and advised a train had travelled over the crossing once they opened the gates after permission was granted. The user was fortunately not on the crossing when the train passed over and it was not reported as a near miss by the train driver.

Investigation discovered Trewern Mill UWC was shown in the wrong location on the signal box diagram.

- The Route Asset Management team altered various signal box diagrams in Wales in 2019, adding level crossings and mileages following a RAIB recommendation from a fatality.
- Three of the four User Worked Crossings that were added to the Whitland signal box diagram were depicted incorrectly relative to other items of infrastructure. All have now been rectified.

Other locations may also contain similar errors.

- All changes to signal box diagrams and workstation screens must be undertaken using the normal signalling design process.
- When existing User Worked Crossings are provided with telephones, the signal box diagram and signalling records should be updated using the normal signalling design process.
- Distances quoted on signal box diagrams should be consistent (in this case the miles and chains were given for level crossings while signals were in yards).

Discussion Points

- How would you find the process to get a signal box diagram updated should you become aware of a change that affects it?
- Who must be told immediately if you find any errors?
- How would you check which records (including those of other disciplines) should be updated to reflect changes you are making to infrastructure?
- What is the best way to check information you are providing on any drawing/diagram is correct, complete and consistent? (E.g. not using mixed measurements systems/units).