High Value Learning Fall incident - open penetration



Date: 14th April 2022 Package: 2B

Background

A serious incident occurred on Package 2B when a worker, who was the trained MEWP operator, fell from the bridge deck bottom slab through an unprotected opening. The worker operated the MEWP to the required access hatch in the abutment wall for the purpose of facilitating access for 2 inspectors who needed to inspect the bridge bearings. After the inspectors had climbed out of the MEWP into the abutment void the MEWP operator followed and for an unknown reason entered the bridge deck void. He then walked through the bridge deck void approximately 35 metres towards the opposite abutment. As he approached the other end of the bridge he fell over 8 metres to the ground through an opening in the bottom slab that was 800 x 800mm.

The investigation identified a number of failures that led up to the incident taking place:

- 1. The opening in the bridge deck slab was not protected despite it being identified and raised by the contractor's HSE inspector on 3 separate occasions
- 2. The voids are classed as confined spaces but there was no permit to work procedure in place to cover the inspection activities
- 3. Whilst there was a method statement and risk assessment in place for bridge works it did not cover the bridge inspection activities in detail



Access to hatch using MEWP



Opening in bottom slab within void



Worker fell through opening here

Learning

- 1. Openings in slabs must be securely covered and provided with suitable warning signage. A register of openings shall be maintained and regular checks must be undertaken to ensure protection remains in place. Immediate action to be taken to make safe any deficiencies identified during inspections
- 2. OSHAD requirements prohibit persons leaving a MEWP to access another place of work. Therefore, MEWPS are only to be used when work can be carried out from the basket. Access into the bridge abutment and bridge deck void areas must be provided via a scaffold
- 3. Both the abutment and bridge deck void areas are to be treated as a confined space and a permit to access/work in the void areas must be issued prior to entry. Any persons entering a confined space shall be trained and understand the risks and emergency arrangements
- 4. All works in abutment and bridge voids shall be planned, the risk assessment and method statement must be communicated to all personnel required to work within these spaces
- 5. Repeat HSE noncompliances and overdue action items raised by the contractor's HSE team must be escalated to senior management via email, HSE meetings, etc.

