



Issue

Agreed choice of materials and construction methodology between designer and constructor considered primarily the initial construction activity without due consideration of subsequent activities.

- *Secondary activity to adjust slab bedding did not follow agreed handling methodology*
- *Methodology would be difficult to employ for small scale maintenance works increasing the risk of exposure to a similar hazard.*



Mitigation

Design

Consider risks associated with the implied activities resulting from the selection of materials and products throughout the life of the element, including maintenance and decommissioning, as well as the initial construction phase. This should include the feasibility of the assumed construction methodology chosen to mitigate foreseen risks in cases where adjustments may need to be made. Alternative surface treatments which still comply with the design brief should be considered to mitigate risks associated with all whole life activities. Care should also be taken to ensure alternative choices to mitigate risks do not introduce different risks of equal or greater severity.

Construction

PC to ensure any agreed methodologies and procedures agreed with the designer and documented within the H&S information provided for construction is followed throughout all related construction activities.

Maintenance / Operations

MSP to ensure that all operational activities and maintenance related activities are in accordance with the design risk assessments documentation produced by the design team.

LINKS

HEi119 Paving Slab RIDDOR – A14:
http://www.highwaysafetyhub.com/uploads/5/1/2/9/51294565/hei119_-_highways_england_for_information_safety_alert_-_paving_slab_riddor_incident.pdf

Actual Incident

Refer to HEi 119 Paving Slab RIDDOR – A14

Choice of materials and construction methodology failed to prevent a serious injury occurrence when an operative's leg was trapped under a slab whilst installation underway on a bridge revetment.

Agreed material selection and construction methodology between designer and constructor with appropriate assessment of risks and health and safety warnings resulted in unforeseen actions leading to injury. The large precast concrete slab was lifted after laying to readjust levels, not safely stored and toppled onto the operatives leg fracturing a bone.



The process highlighted the importance of thorough consideration of all potential activities within construction and maintenance to ensure the elimination of risk so far as reasonably practicable.

Significant Risks

Activity / Incident	Risk	Persons Affected	Likelihood / Severity
Construction – initial laying	Manual handling / heavy load / falls from height	Construction operatives	L:Medium S:High
Construction – adjustment of materials	Manual handling / heavy load / falls from height	Construction operatives	L:Low S:High
Maintenance	Manual handling / heavy load / falls from height	O & M personnel	L:Medium S:High



Please submit examples of similar issues or best practice to the Whole Life Design Group at tx@jacobs.com for consideration for incorporating and dissemination to designers