



Issues

- Limited working areas
- Rollers overturning during construction
- Steep batter within constrained site
- Proximity of Highway Boundary
- "Red Line" boundary overly confining



Mitigation

Design

Designers to work with Principal Designers (PD) and the Client to ensure access requirements are considered for construction, early in the design process. This will ensure that the available working area dictated by the Highway or Red Line boundary is sufficient to allow safe working. Use of 3D visual models will help here. Have the design team liaised with all the stakeholders to better understand how the ERA will be built, used and maintained?

Construction

Early contractor involvement and close liaison with the PD during the design phase to ensure that sufficient working area is provided as part of the proposals. This will ensure safe working area is available and that the works can be undertaken safely due to the adequate positioning of the permanent or temporary Red Line boundary.

Maintenance / Operations

Required access for future maintenance and operational activities should be considered as a key element of the design development. Designers should consider how access will be gained and what working areas are likely to be required whilst undertaking maintenance and operational activities.

LINKS

- [HEi035 Overturned Ride-on Roller](#)
- [HEi078 Overturned Rider on Roller](#)
- [HEi087 Use of Compact Rollers](#)

Case Studies

HEi078 - Overturned Rider on Roller

During compaction of a piling mat forming part of the permanent works for an ERA, the operator drove too close to the edge of the platform and the back end of the roller began to slip over the edge of the platform. The roller tipped over slowly on its right-hand side with the operator still at the wheel.

HEi087 - Use of Compact Rollers



In April 2019, on schemes across the Smart Motorway Programme, there were three incidents involving narrow (800mm) ride-on twin drum rollers overturning.

Fortunately, no one was seriously hurt with only one incident resulting in a minor injury where the operator received hospital treatment.

Examples of Significant Risks

Activity / Incident	Risk	Persons Affected	Likelihood / Severity
Construction	Working adjacent / creating steepened batter	Construction workers	L: Medium S: High
Access for inspection/ maintenance	Access / working on steepened batter with limited access at grade	O&M personnel; Traffic Officer Service (TOS)	L: Medium S: High
Use	TOS advise standing behind the ERA barriers	Road User / TOS	L: High S: High



Please submit any feedback, examples of similar issues, or best practice to:
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