

Asset Protection & Optimisation

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Purpose of presentation

To explain why NR 'asset protects' and how we support and enable third party projects

- To give an overview of requirements on third party and outside party clients and their suppliers
- To promote the role of the asset protection team as a collaborative service for delivering non-NR projects.... possibly the most diverse portfolio you'll come across!



Some Definitions

- **Outside Party works – see NR/L2/CIV/096**

No benefit to the railway but need to provide a safe interface for activities. Examples – new over bridges, UTX, adjacent development sites, tree cutting, bridge inspections etc.

- **Third Party works – see NR/L2/CIV/095**

Projects where an organisation other than NR undertakes work on the railway that affects, creates or removes a Network Rail Asset. Examples are work by TOCs or Councils at stations, depot changes, gauging for new trains etc...

The ASPRO team also manage land clearance activities for NR property where land may be sold to developers, for example.

Why NR Asset Protects

- The Railway Act and Network Rail's Licence places a legal duty upon Network Rail to provide assurance that the railway is safe to use and a safe place in which to work
- Health & Safety at Work Act and CDM Regulations place a similar **obligation upon Network Rail** whenever construction work is taking place on the infrastructure
- HSWA & CDM Regulations place similar **obligations upon Third Parties and Outside Parties** working on or near the railway. Network Rail seeks to satisfy itself that these obligations are being adequately met

Asset Protection

- The 'asset' is the railway infrastructure (it is both a valuable and a dangerous place).



Asset Protection includes the protection of:

- The infrastructure (eg track & track support; signalling; electrification).
- People working on the infrastructure
- The users of the infrastructure by trains (eg TOCs and FOCs ; travelling public)
- Protection of the Outside Parties themselves

Scope of ASPRO

- Assess the Outside party scheme and its interface with NR assets
 - Risk Assessment of the scheme against the work being undertaken, imposing engineering conditions and risk mitigations as necessary
 - Agree Programme of works and whether any possessions required
 - Provide Protection staff – COSS, ES, LO, Site Wardens etc
 - Ensure compliance with the Readiness Review Process regarding possession works.
- Assess the potential risk of works to Network Rail assets, railway operations and users. Whole system view, not just about protecting assets/infrastructure.
 - Ensure appropriate control measures are in place to mitigate risks.
 - Assure designs for 3rd Party projects, in accordance with NR standards, where assets will be ultimately handed back to NR.
 - Working closely with asset management and other internal stakeholders.
 - Acting as DPE/PE, subject to same competency requirements as NR's project engineering teams.
 - Specialist support often required for complex 3rd party schemes.

Agreements

We enter into Agreements to:

- Clarify what Network Rail and yourselves will respectively deliver and what our respective obligations are
- Identify the scope of the works
- Establish anticipated Network Rail costs in providing our service to you, and the payment terms
- Ensure each parties liability is identified,
- Insurances including Public Liability Insurance

These are templated documents produced in agreement with the Office of the Rail Regulator

Types of Agreement

There are four main types of agreements when engaging with ASPRO:

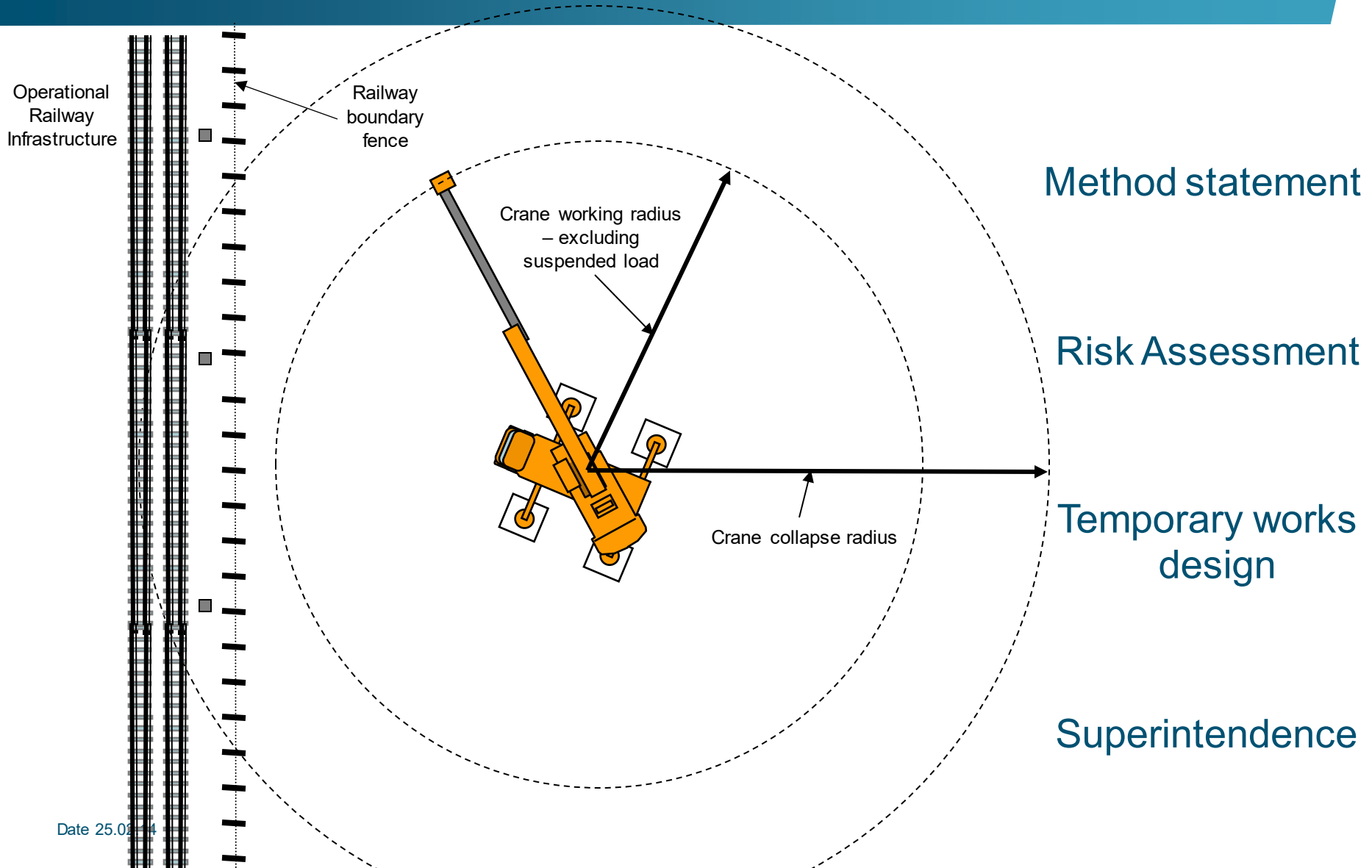
- Basic Services Agreements (for Professional Services and are non-intrusive)
- Basic Asset Protection Agreements (implementation agreements)
- Asset Protection Agreements (for major works)
- Bridge agreements (2 Party and 3 Party UB & OB)



Other relevant agreements & Wayleave arrangements, Depot Lease and Station Lease agreements are implemented by NR's Commercial Property Team.

- Clearances – the sale of NR land to a third or outside party, managed via ASPRO

Plant working adjacent to the railway



Craneage and Plant working adjacent



- Can the lift be undertaken where the collapse radius including load does not encroach beyond the railway boundary exclusion zone?
- If no can the jib be slew restricted to prevent the collapse radius encroaching beyond the boundary?

If yes: working platform design needs to be submitted.

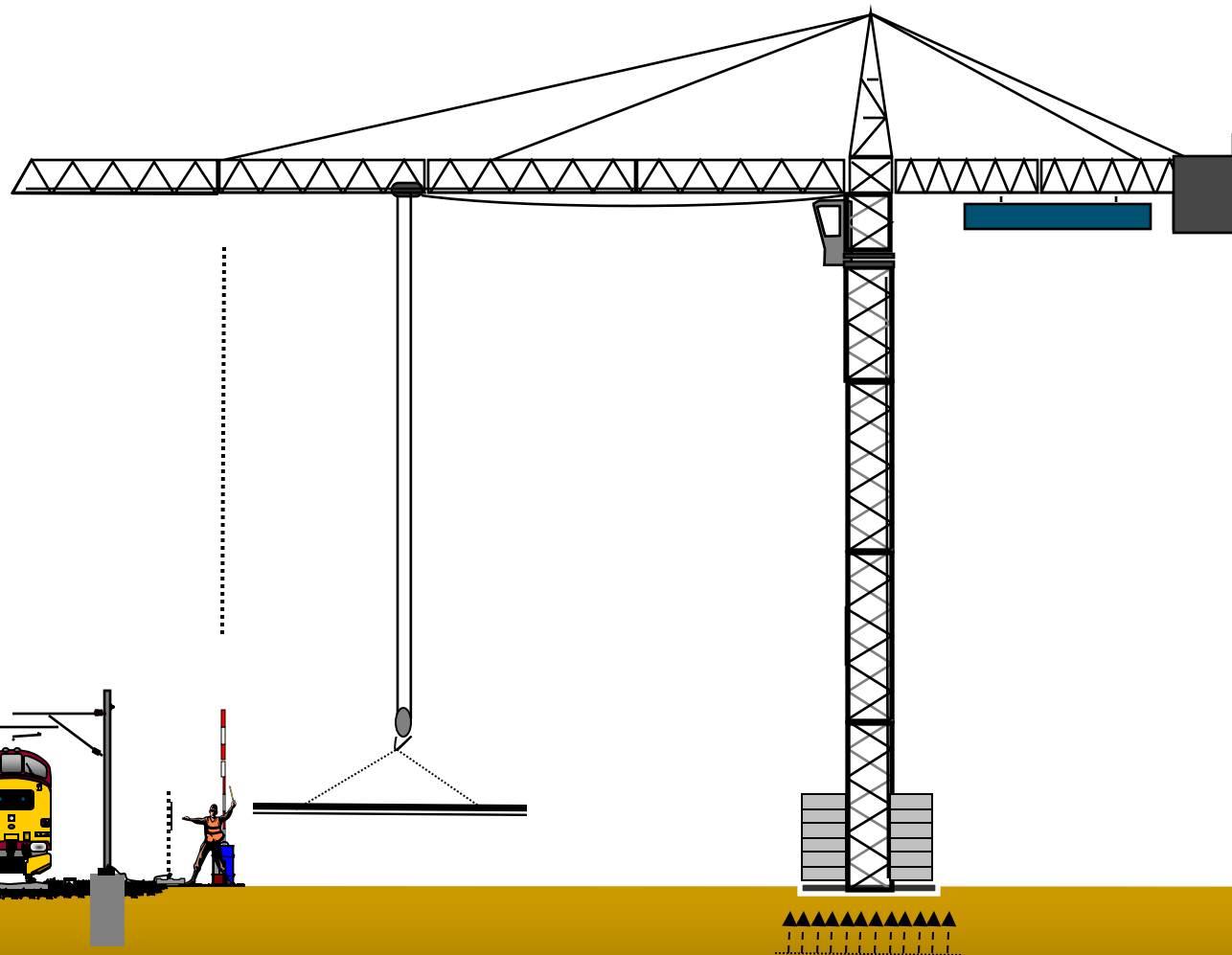
If no: lift needs to be undertaken during a possession and working platform design submitted.

- Method Statement and Risk Assessment to be submitted for review.

Piling Rigs



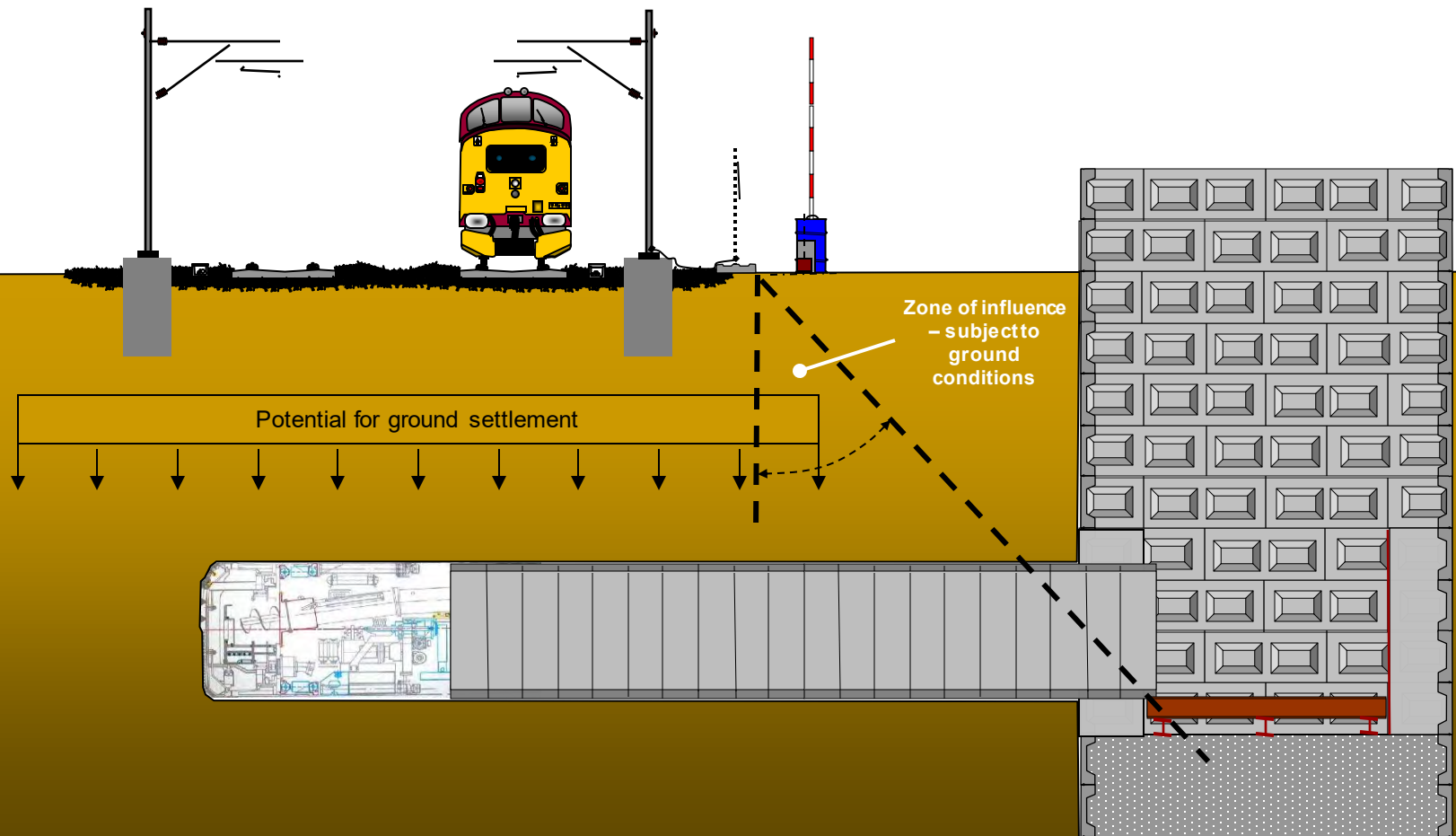
Tower Cranes



Tower Cranes

- Luffing or saddle crane –
- Can the collapse radius encroach beyond the Network Rail boundary?
 - If yes slew restrictions are required
- Licence for oversailing required
- Design check certificate for foundation
- Down rating of crane height and lift capacity by 25%
- Methodology review for erection, use and dismantling
- Superintendence of works

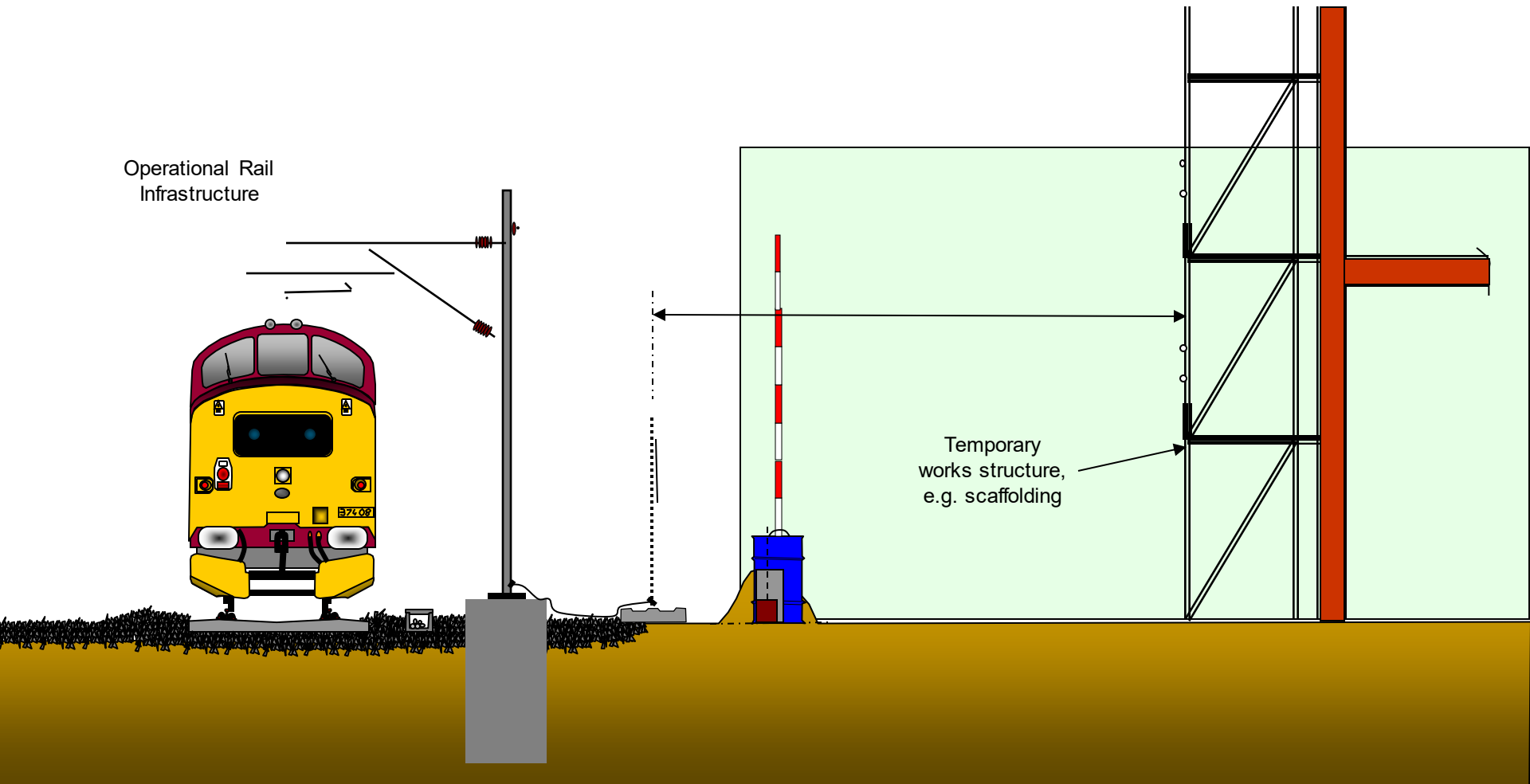
Working within the influence zone



Works within the influence zone.

- Undertrack Crossings, Piling, Retaining Walls, excavations, de-watering, tunnels.....
- Design submissions
- Settlement predictions
- Ground Investigation
- Remedial on call arrangements
- Asset Management Plan
- Track Monitoring when within influence zone

Scaffolding

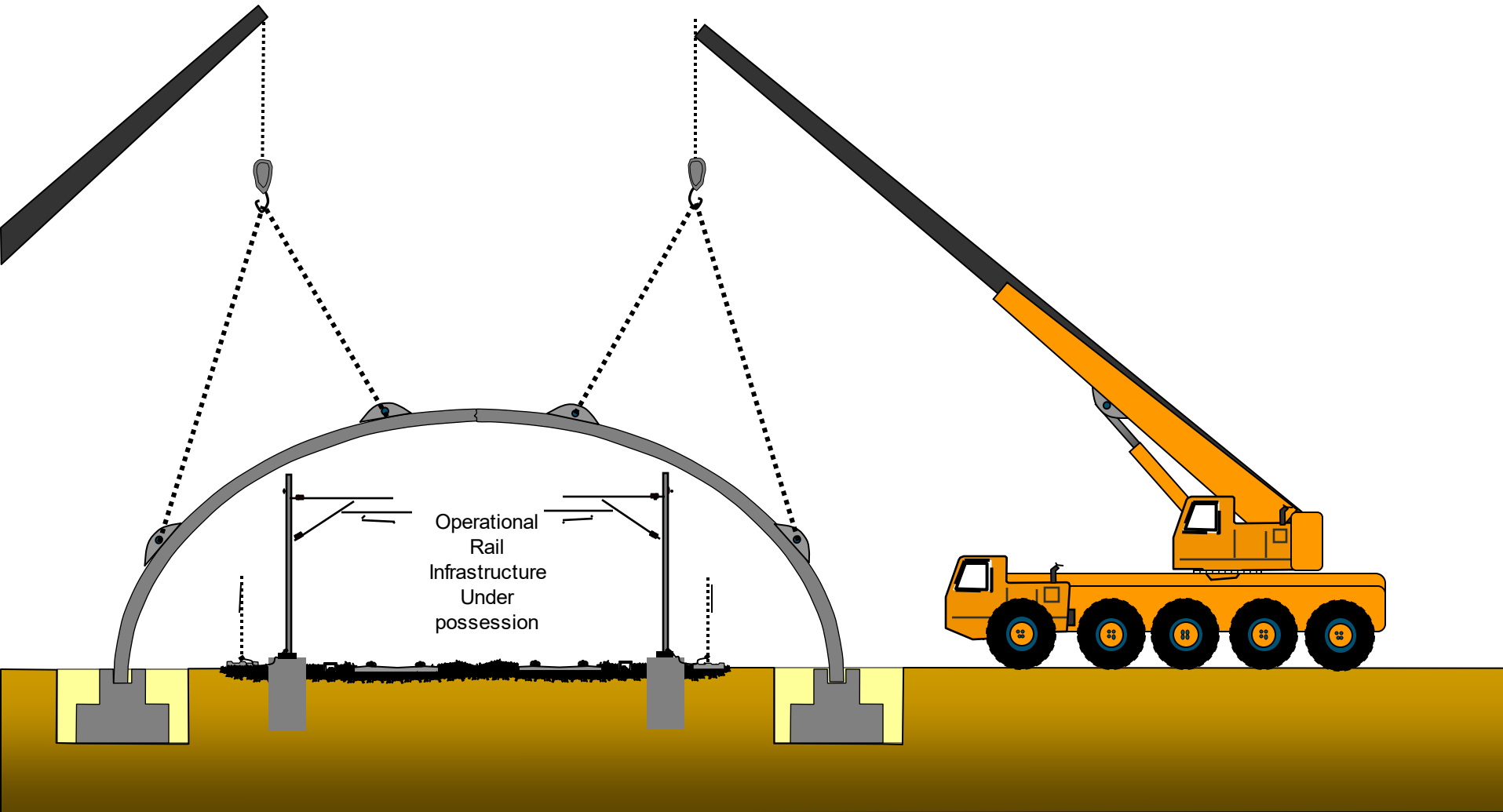


Scaffolding

- Collapse beyond the boundary
- Temporary works design to be submitted including assessment of ground conditions.
- Method Statement and Risk Assessment
- Possibly needs bonding?
- Licence required if erected on NR land.
- Wind Loading – future forecasting



Operations Over the Railway



Operations Over the Railway

- Bridge Agreement Required
- Possession of the line to be arranged
- Network Rail superintendence of the works
- Isolation of Overhead electrification as applicable
- Temporary works design for working platform and temporary stability
- Method statement and risk assessment
- Sign off, stating installed in accordance with the design prior to handback of possession



Temporary or Permanent Works, equally disruptive if not managed safely.



Supporting Structures

- Full design submission to Network Rail in accordance with our standards.
- Culverts/ Tunnels
- Underbridges
- Retaining Walls
- NB: Assets that will come into Network Rail ownership will also require full design submission.



Know your boundaries...



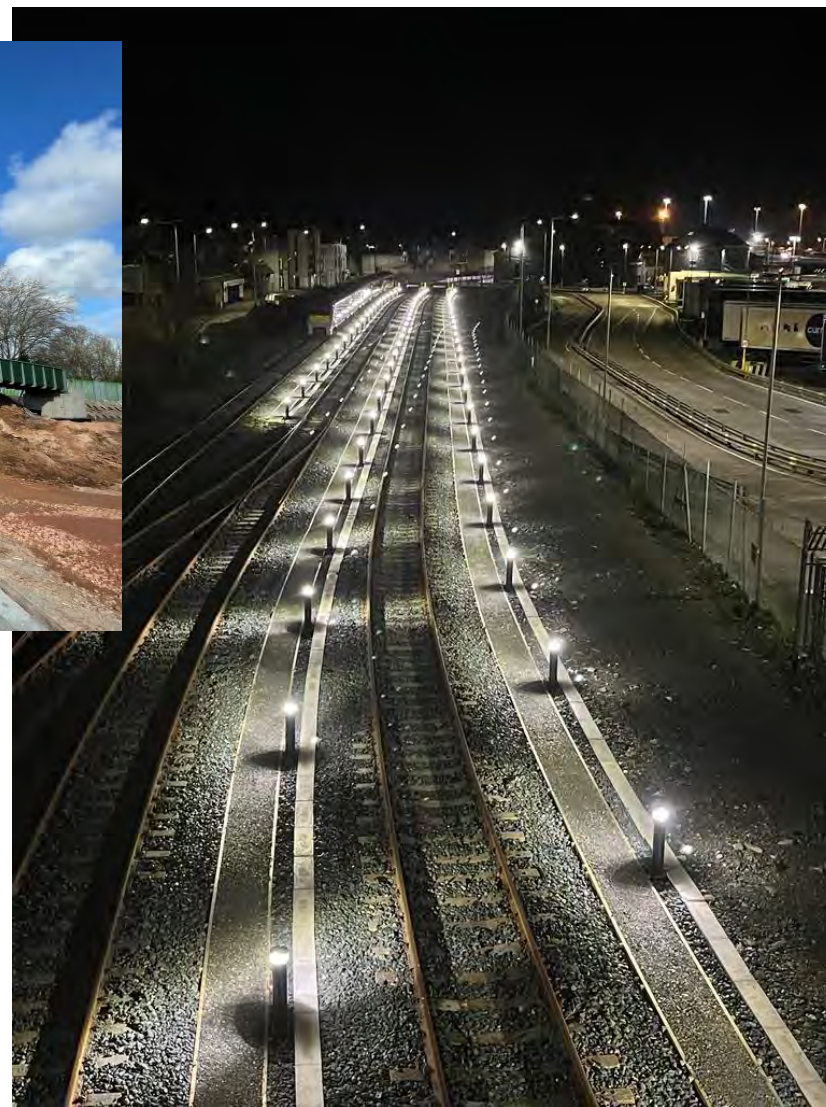
Risks are perhaps not always obvious....



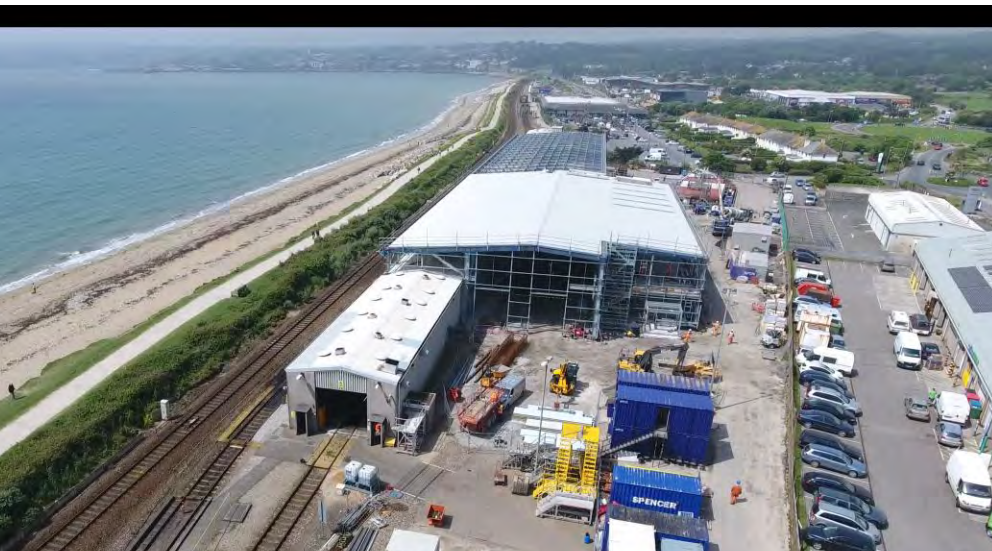
....but very obvious to some.



Building with 3rd Parties



Supporting delivery of great projects



Finally...

- Involve Network Rail EARLY & provide as much information as possible to help us to help you.
 - We understand the risks on our railway,
 - We know what is there, we have a wealth of information,
 - We know the condition of our assets
 - We know the access arrangements
 - We own the possession plan
- Follow our procedures so that we can assess the risks together and help to make your schemes safe and successful.

Contact

www.networkrail.co.uk > running the railway > looking after the railway > Asset Protection and Optimisation

Notify us of work using the ACE System:

- *Asset Protection Customer Experience System*

OR email:

AssetProtectionWestern@networkrail.co.uk

AssetProtectionWales@networkrail.co.uk

NB: Other region contact details can be found on the NR website

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Questions ?