

Lessons Learnt: Local & Formal Investigations

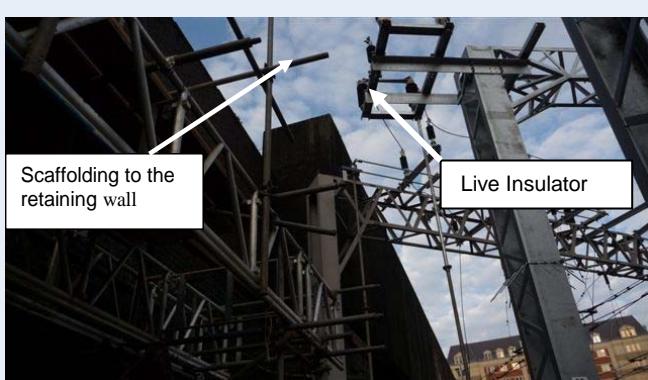


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Issued By: Central HS&E: Investment Projects
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Issue Number: 002: Erection of Scaffolding Structure within 500 mm from the live OLE on Birmingham Gateway Project – 23/11/2010

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Overview

- A scaffold structure was required, partly as a working platform and partly as a crash deck for the partial demolition of Hill Street retaining wall, in order to facilitate the placement of the extension to Navigation Hill Street Footbridge at Birmingham New Street Station.
- The Form C for the temporary works had been signed off by the Works Contractor, Contractor's Responsible Engineer on 18th October.
- The structure required 7 scaffold towers to be constructed.
- Towers 7- 4 were erected as planned in the beginning of November
- Their proximity from the track meant that an isolation or possession was not required.
- Scaffold towers 1-3 were scheduled to be erected on 23rd November. Due to their proximity of the these scaffolding towers to the track/OLE an isolation and possession were required to be taken.
- The Work's Contractor Site Manager took the decision that they were still within a "Lineside" environment and that the planned possession and isolation were not required.
- Immediately adjacent to this worksite a separate worksite, also under the control of the same Works Contractor had erected a new Twin Track Cantilever OLE gantry on 22nd November.
- An assumption was made by the Site Manager erecting the scaffolding that this newly erected OLE structure had not been commissioned.
- At the time of erection the OLE structure was isolated, but it had been commissioned and was due to be handed back into service at the end of the shift
- A passing NOM and Earthing Assistant on passing the scaffolding worksite immediately identified that the new section of scaffolding had been erected within 500 mm of this OLE structure.
- Work was stopped and the area made safe.

Underlying Causes: Contracting Strategy:

- NR were contracting directly with a number of Work Package Contractors for developing Detailed Design and Temporary Works. This enabled the Principal Contractor to stand back from the coordination, control and management of the works.

Project Engineering:

- Relationships between the NR Civil Project Engineering Team and the Works Package Contractor were not working, causing delays and importing risk. Evidence existed of works being constructed without designs being accepted.

Programme Slippage

- The construction programme relating to the retaining wall had slipped, which had the effect that this work and the OLE works were undertaken simultaneously

Communication

- The impact of this slippage had not been communicated to the Temporary Works Designer, meaning vital information was missing, causing conflict between the scaffolding and the OLE works.

Inter Disciplinary Check

- An IDC had not been undertaken. If it had it is likely that the conflict described above would have been realised.

Temporary Works

- The PC had no process to manage Temporary Works

Key Message:

It is essential that inter disciplinary checks of designs take place, in order to establish that different design elements work together without causing danger to those involved in the buildability of the individual work packages.