

Operations Directorate Avoidance of overhead power lines

Safety Alert

May 2017

Incident description:

As part of enabling works on the M23 a pack of communication ducting was being offloaded by a lorry mounted crane (LMC) on the 2nd February 2017.

As the LMC was being raised it came into close proximity to an 11Kv overhead cable causing the cable to arc resulting in a flash. The cable became separated and fell onto the embankment and the south bound carriageway. The LMC was not struck, however the lifting chains took the electrical arc and sustained minor damage.

The two operatives involved were unharmed.

The cable was left across the live carriageway from 03:15 to 07:30am.



Investigation findings:

- Blue cones had not been placed across the closed carriageway to denote the position of the Over Head Line (OHL) as prescribed within the Health, Safety and Environmental Management Plan.
- The location had been misinterpreted from the service plan and as a result the pre-works briefing gave the wrong marker post location for the OHL.
- The incident wasn't escalated higher than bronze resulting in the cable being left in the live lanes; this was due to a lack of understanding of electrical hazards and who was responsible ie Service Provider or RCC.
- Incident commander not established and escalation to duty operations manager wasn't in a timely manner.
- Scene exclusion zone not communicated to traffic officers in a timely manner.

Actions:

- Check the accuracy of all service drawings and ensure legends are clear.
- Ensure all sites with significant hazards are checked during daylight hours prior to work starting by an appointed responsible person.
- All OHL's to be identified with blue cones and/or goal posts. Work must not commence until these are in place.
- The information from within the Construction Phase Plan are to be used to deliver pre-works briefings rather than relying on information within the service drawings.
- Ensure there is a robust system in place for incident management within the incident management plan.
- Ensure there is suitable and sufficient Supervision for the risks on site and the complexity of the works.

Key Considerations:

- No use of carriageway closure to protect scene and safety of customers and responders. A rolling road block to control safe approach to scene should be considered.
- RCC to establish a single point of authority at relevant incidents that require escalation and identify a bronze commander.
- Appropriate electrical safety briefing required for staff.

Linked work instructions:

Rolling road blocks and stopping TOV in live lane, Minor incidents

For further information please contact the National Health and Safety team Via NH&ST@highwaysengland.co.uk