



# Safety Alert

## Overhead Cable Strike

29 March 2022

The following pages of this safety alert were issued by National Highways' supply chain partner:

### AE Yates Group:

- SA.AEY.2202 Actions taken
- SA.AEY.2203 Full facts and lessons learned

## 11kV Utility Strike Driver Action

# Safety Alert

SA/AEY/2202 Rev 01 March 2022

### Details:



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On 1<sup>st</sup> March 2022 at our Cross-a-moor Roundabout Project a 20T excavator came into contact with an uninsulated 11kV overhead cable. Fortunately no one was injured and the utility company repaired the damaged cable within a few hours. The full facts and lessons learned of this incident will be published on Safety Alert SA/AEY/2203.

This alert is focused on operative action Immediately after the contact.

Following shouts from across the site, the driver exited the machine and walked clear. The situation had not been fully assessed when the driver took this action,

thankfully the machine was not forming part of the circuit allowing the driver to escape without injury.

### What should you do if a cable is struck?

- If you do hit a cable, keep calm.
- Phone your site Manager who will contact the Utility Owner.
- Stay in the cab of the machine and lower any raised parts in contact with the line or try to drive the machine clear, if you can.
- Electrocutation is possible if anyone touches both the machine and the ground at the same time. If you need to get out jump well clear so that no simultaneous contact is made between you, the vehicle and the ground. Do not touch any wires. Stay clear and warn others not to approach.
- Get the DNO to disconnect the supply. Even if the line appears dead, do not touch it, or any part of the machine. Contact with the line may cause the power supply to trip out temporarily and it may be reconnected and re-energised automatically, without warning.
- Never touch an overhead line that has been brought down by machinery, or has fallen, e.g. in a storm. Do not try to disentangle equipment, until you have received confirmation that the line has been de-energised and made safe.

Every year in the UK, two people are killed and many more are injured when machinery comes into contact with, or close proximity to, overhead power lines. If a driver finds themselves in this position it is important that they keep themselves aware of the danger and prioritise their safety.

Revision	Date Issued
00 Draft for review	17.03.22
01	21.03.22

## 11kV Overhead Cable Strike

# Safety Alert

**SA/AEY/2203 Rev 02 March 2022**

### Details:

On 1<sup>st</sup> March 2022 at our Cross-a-moor Roundabout Project the arm of a 20T excavator met an uninsulated 11kV overhead cable. Fortunately, no one was injured, and the utility company repaired the damaged cable within a few hours. Due to the potential consequences of this incident, it has been classed as a Safety Critical Incident. We have reported this Dangerous Occurrence to the Health and Safety Executive.

The initial facts point to the importance of change management (STOP, CHECK, GO) and ensuring that our established control measures are in place.

At approximately 3pm on Tuesday 1<sup>st</sup> March 2022, a 20T excavator tracked under an overhead cable, snapping 2 of the 3 cables with its arm.

Where the new roundabout and connecting road was being built, the GS6 had been set out on site to cover the road, with a second set established next to them to extend the control measure into the field. Following some strong winds earlier in the week the GS6 had blown over with one set being damaged, when tidying the site after the extreme weather, the GS6 was re-established over the road but not extended to cover the remaining area.

No work had been planned near the Overhead Cable, on the day of the incident, an excavator and dozer driver changed their location without informing site management. This change took them closer to the overhead powerlines. When moving to go and change the bucket, the arm of the excavator caught the 11kV line.

### Learning

A site needs to address hazards and implement any mitigation prior to start of works, GS6 checks should be taking place prior to commencement of works and during shift to ensure nothing has changed.

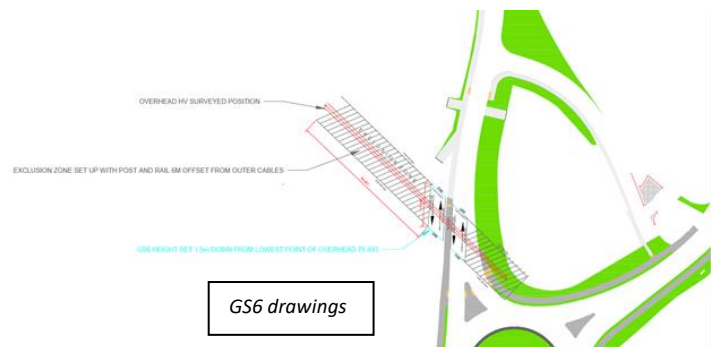
Operator action following the incident was to climb out of the cab, advice was not followed, internal safety alert SA.AEY.2202 has been produced following this action.

By not implementing physical barriers at this potential thoroughfare, it has allowed for plant to pass under the overhead cable where the strike happened. The unauthorised access and egress route has occurred from there being no established access / egress routes readily communicated and failing to block all other routes that could be taken.

Management must consider dangers from utilities, both overhead and underground, right from the start of the project and plan to deal with the changing landscape of the site over the length of the project. If services can not be diverted before work starts mitigation must be in place and maintained.

Following any Change on site, Managers and Supervisors must make sure work is stopped and everything is checked before recommencing work.

Scorch marks on excavator arm



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## Improvements

To prevent any further incidents site management will immediately put in place the following;

- Change will be added to the site RAMS and briefed to the workforce.
- Roll out and Brief Raising the bar 7 (RB7) to the AEY group and our supply Chain
- RB7 now forms part of the method statements on site and is briefed to all operatives.
- Re-brief site personnel on STOP, CHECK, GO, as well as added into induction slides and always highlight it in start of shift briefings.
- RAMS have been developed for the install and maintenance of GS6 in line with RB7, the method statement demonstrates how to plan, install and maintain which forms part of the assurance that RB7 is being adhered to.
- Permit to Pass Under Overhead Services introduced on site.
- Hazard Identification training delivered on site, including with the Management Team.
- Experienced Supervisor deployed on site who, with a 2-man gang, has the role of hazard identification, mitigation and responding to any hazard reports.
- Timber Post and Rail fence installed to form safety corridor / no-go zone.
- Banksman near all GS6 Goal Posts to control permit to pass and perform checks.
- Newly inducted operatives to be given yellow hard hats so people unfamiliar with site can be easily identified.

Through sharing this experience, we hope that our colleagues, supply chains and strategic partners can learn and prevent a more serious occurrence.



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