



Safety Alert

Vehicle Beacons and all Task Lighting

11 April 2023

Background information

Costain's advisory team were recently commissioned by National Highways to complete a deep dive review and provide an informed national picture of overnight roadworks across the Strategic Road Network.

The survey covered all providers and regions and identified that contractors are failing to ensure that road users are not being dazzled by vehicle warning beacons, vehicle mounted task lighting and tower light mounted 'white' task lighting. Poorly oriented task lighting has the potential to increase the risk of an incursion upstream or downstream of the works and putting operatives and road users at risk.

Some road users are more sensitive to glare and bright lights than others. These fall into two primary groups:

- Older users – whose eyes dilate less well with age and who are also more glare-susceptible, so 'reading the road' is more difficult, especially after being dazzled by bright lights.
- People with neuro-diverse conditions including migraine; epilepsy; Irlen Syndrome; dyslexia; dyspraxia; autistic spectrum condition and ADHD. 20% of the population has one or more of these conditions. These users are more likely to be light-sensitive, and while research has resulted in building design guidance (a British Standard is currently in development following the research) the same users are affected in a highway context in a way that is often overlooked, including glare from uplighters and dazzle by headlights and task lights.

The older driver's safety potentially has a further risk, because in the event of a collision, they are disproportionately likely to suffer serious injury. It's therefore important to take care in positioning task lights and vehicles, and in moving them while illuminated, to consider the comfort and safety of all road users, but especially these groups.

Lessons Learnt

- Task lighting must be positioned in a way that does not dazzle oncoming drivers. This also applies to vehicles parked on side roads or slip roads adjacent to the main carriageway works. Task lighting must be directed downwards and not directly towards oncoming vehicles.
- When parked within a works area or working space, vehicle mounted amber warning beacons and lamps are also required to be switched off on works and temporary traffic management (TTM) vehicles, a long standing requirement reiterated in 'Raising the bar 2' see: <https://www.highwayssafetyhub.com/raising-the-bar-guidance.html> which provides further information on vehicle movements within TTM.
- When parking a works vehicle against the flow of traffic is required to deliver a works operation, headlights as a minimum must be switched to side lights to reduce the risk of driver confusion.