

Safety Alert

Lighting Unit dropped through Incorrect fixing

10 December 2019

Background information

A recently installed street lighting unit dropped to the ground on the A27, fortunately without causing harm, as a result of an unauthorised modification to the lighting unit / column arm connection.

Investigation Findings

The lighting unit was attached to the horizontal arm of the column, 15m above the carriageway via a horizontal, 100mm long, male to female tapered connection (Photograph 1).

A lanyard was provided to provide secondary protection to prevent the unit falling, however the bracket securing the lanyard would not fit around the main arm of the column bracket and was instead bolted to tapered section of the arm connection.

The unapproved lanyard installation resulted in the lighting unit connection and lanyard bracket working loose and falling to the ground.

The connection required a full 100mm engagement due to the location of fixing bolts and the internal taper of the lantern fixing.

Remedial works were required to all lighting units installed in this manner with the unauthorised detail, to provide the full 100mm connection (Photograph 3) along with re-torquing the fixing bolts to manufacturer's settings.

Recommendations

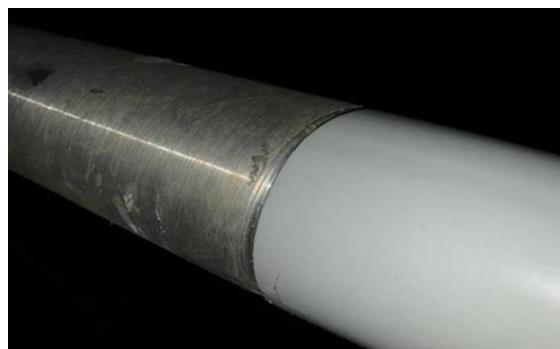
Changes to the lanyard connection must be approved by the Designer / Manufacture and agreed with the Overseeing Organisation.



Photograph 1. Lanyard incorrectly fitted



Photograph 2. Lighting Unit to Column fixing



Photograph 3. Correct Fixing Detail