

INFORMATION



30 August 2024

Background information

- During cyclic inspection and testing, 50 steel lighting columns have recently been cut down in one location on the strategic road network due to severe corrosion and loss of section. (Batch testing on 246 similar aged columns identified 45% of as amber or red).
- The steel columns were aged over 35 years and generally located in an exposed environment. Previous inspection reports were unavailable.
- Columns had corroded internally, either at or below ground level for planted columns, or just above the welded connection for flange plated (FP) columns. Corrosion to the FP column was internal and may not be apparent from inspection alone.

Lessons Learnt

- Robust inspection and testing is essential to manage structures approaching service life end. The risk of corrosion failure increases with age (generally >30 years) and columns have a finite life. Untested installations should be prioritised for non-destructive testing in accordance with National Highways standards and procedures. See GS801.
- The type and extent of any testing should be pertinent to the defect under consideration, i.e. corrosion could be missed if testing checks are not undertaken around the whole column circumference. Testing guidance is available within <u>ATOMS</u>.
- The effect of corrosion reducing the structural thickness of the column wall should be considered by expert review, and where necessary analytical assessment.







