Background information

On 22 May 2019 one of our maintenance contractors working on a portal gantry over the M42 spotted a crack in the support bracket of a MS4 sign, located on top of the gantry.

This crack was inspected by the Area structural engineers and the decision taken to remove the sign to manage the risk of the crack progressing rapidly in high winds.

A subsequent investigation identified 63 other gantries on the M42 with similar connections supporting MS4 signs. A programme of special inspections was undertaken.

A further 10 MS4 sign supports were identified with similar defects and subsequently removed.

The defects are currently being investigated and tested to fully understand the root cause. The key concern is that the support relies on a single connection, with no alternative support should the weld fail.

Recommendations

- Area teams and inspectors should be aware this concern and where similar details are present, thoroughly inspect the welds for signs of cracking during Principal Inspections.

- Where possible, Designers should seek to avoid replicating this detail and look to introduce secondary support connections to provide a failsafe safe design.