



## CASE STUDY

**Project name:** Prevention of trip & missile risks  
**Client:** Bedford Borough Council  
**Contractor:** Stacey Construction (Mike Stacey Group)  
**Site:** Lime & Harpur Street's - Bedford  
**Project:** Strengthening & rebuilding  
50 paved highway manhole covers  
**Product/s used:** Polycote 2 pack  
**Date:** September 2009



### Problem:

The standard manhole cover trays had become seriously damaged by vehicle weight and manoeuvring.

Many had sunk causing the paving to become completely destabilised and creating trip and block fragmentation problems with resulting damage to other property.

These trays needed to be repaired and the substrate upgraded to ensure no reoccurrence.

### Solution:

The treatment has been to remove the relevant trays in small batches (4 to 6 at a time), fitting steel chequer plate temporary covers to enable repairs to the trays, and the new jointing material to cure overnight.

The existing paving is removed from the cover and the sides and base are rotary wire brushed to remove all surplus material. Trays are inspected, re-welded and strengthened as necessary.

3-4 mm dried aggregate is mixed with Polycote heavy duty 2-pack resin and then this is laid in the base of the pre primed tray to form the support for the block paving elements.

The paving elements are suitably primed on each base and sides to ensure adhesion to the aggregate. The paving elements are then repositioned into the trays and they bond to the aggregate base.

Next the vacant joints are filled almost up to the level of the paving elements with Kiln dried sand. The 2 pack clear HD resin is then slowly applied until all the joint sand is saturated and left to cure. The trays are then relocated in the relevant manhole cover support frame.

### Benefits:

This innovative process, when cured creates a fully bonded steel/aggregate/paving/joint sand sandwich structure which is much stronger and far more resilient than the original.

Areas under repair are constantly protected thereby avoiding costly area closure time.

The finish is now non slip and the original paving is reset to a matching level to ensure no further trip risks in this high traffic area.