



# Priority TM, Impact Protection Vehicles

## Project Background

When Priority TM approached Highway Care to help build a specially-made, shorter than usual, impact protection vehicle (IPV), with a lorry mounted crash cushion and light arrow, we knew just the people who could assist us. Our Mobile Traffic partner Bevan Group, were the right people to join us in this collaboration to help build an IPV at a shorter length than normal.

Priority TM offers solutions to a broad range of traffic management schemes, from basic temporary traffic light systems, minor road closures and diversions, to multi-head, multi-phased temporary traffic light systems and major lane closures on some of the UK's busiest and most congested roads.

The company's headquarters are in Chelmsford, but the new truck was to operate primarily from its depot in Greenwich, on the south bank of the Thames, including night-time closures to traffic so routine maintenance can be carried out on places like Tower Bridge.

## Project Challenge

The challenge presented to us and Bevan Group, was to build a shorter than standard impact protection vehicle (IPV) and supply and install a lorry mounted crash cushion, plus other required Traffic Manual Chapter 8 traffic signs.

The real challenge here was to supply the IPV's in as quick a time frame as possible, so they could maximise the amount of jobs they were able to carry out right away.

## Project Installation

The IPV was designed specifically with operation in and out of the City of London in mind. Crucially, at just 4.5 metres in length its body is 2.2 metres shorter than that of a conventional impact protection vehicle. The feature, which enhances agility and manoeuvrability, had earned the truck a nickname of 'Stubby'.

Bevan Group, engineered the IPV to an exceptionally high standard. Two tonnes of steel ballast were included beneath the bed, to ensure the truck achieved the minimum 10-tonne gross weight required for an impact protection vehicle.

Highway Care supplied the Safe Stop 90™ lorry mounted crash cushion (SS90) to absorb rear-end impacts at speeds of up to 68 mph (110 kph compliant to TD49/07) and can be deployed at a travelling speed of up to 55 mph.

The SS90™ is potentially reusable, depending on each individual impact made.

It boasts a galvanised external safety frame that offers protection against the low-speed 'nuisance' impacts – incurred, for example, when a vehicle is manoeuvring in a yard – which are a common cause of damage to crash cushions.

Highway Care also supplied the high-visibility motorway light arrow, purpose built for Priority TM's impact protection vehicle. The motorway light arrow is a vertical LED light arrow with folding option available, to notify drivers of workforce operating next to the truck.