

Client:
Contractor:
Location:
Completion:

Highways England
NEC 3 - Area 14 Collaborative Working Framework
A1(M) J50-51, Leeming to Ripon 60mph Contraflow Scheme
Completion: January 2020



# Traffic management 60mph contraflow trial on the A1(M), Area 14

## The Challenge

Provide a temporary traffic management contraflow system for roadworks during two phases; one phase as a base for comparison with traditional speed of 50mph through roadworks, and the second phase trialling the new 60mph speed limit.

Following the first part of the trail which saw roadwork speeds at 50mph, a challenge was converting to 60mph for the second phase of the trial.

#### **Our solution**

Working collaboratively with other Area 14 supply chain partners, we developed and carried out a contraflow system during road resurfacing works using narrow concrete barriers and trialling the 60mph speed limit.

We supplied Traffic Management for two phases: phase one was completed at 50mph over a distance of 8.6km. Phase two was trialled over a distance of 7.2km with the speed limit adjusted to 60mph. The works were completed during overnight closures using established contraflow phases, road and lane closures. Utilising overnight closures, the narrow lane system was extended to cover both phases one and two. The buffer zone was moved up the carriageway to cover Phase 2.

As works progressed, narrow lanes were removed from Phase 1. When the buffer zone was completely in place, the 50mph signage was replaced with 60mph signage during overnight closures to mitigate confusion to the public. We installed the Phase two contraflow system during the same night to roll straight into the higher speed trial.

The works were completed over six months.

This scheme was the first contraflow ever at 60mph in the UK, as well as the first time the RB80S lightweight concrete barrier system used. The use of the RB80S barrier mitigated the need to drill into the new road surface that had been laid within the last year. This trial was also the first time safety gates were used in conjunction with RB80S barriers.

### **Results and Benefits**

Close collaboration between all A14 contractors on the Framework prior to and during construction ensured working windows were maximised.

The 60mph contraflow trial was successful in demonstrating the safe passage of travel through works with minimal disruption. Safety of workforce and road users was the number one priority throughout the works.

The scheme was designed to increase speed compliance, decrease journey times, and provide a reduction in tailgating and close following. No complaints were received, and road users experienced well maintained traffic flows. Positive feedback for improved journey times was documented and zero incidents recorded.

The scheme review has driven continuous improvement across Area 14 and Highway England's 60mph programme. Results have influenced best practice for further 60mph trials.

## **Additional information**

Tarmac Traffic Management designed and organised the contraflow system alongside other Area 14 suppliers.

#### Collaborative working companies used were:

- CCTV provided by VPS (vehicle property services)
- RB80S Temporary VRS provided by Asset. The RB80S provides H1/W4 containment and was designed and tested in accordance with EN 1317-2.
- Permanent precast VRS central barrier provided by Hardstaff barrier services.
- · Recovery services provided by BDV.

WJ provided both permanent and temporary road markings - higher reflectivity and innovative coating to reduce glare from existing lines to benefit road users.

Liaison meetings were held weekly between the contractors and Highways England representatives.

One of the most significant pinch points was getting the barrier installed in the allocated time. To maximise the construction working window, we were under time constraints to enable main carriageway surfacing works to start as soon as possible.

The innovative concrete barrier system used c. 30% less of the amount of articulated trailers when compared to multiblock concrete, had a much lower deflection rate and narrower profile allowing better lane width - if we didn't use the narrow concrete blocks, we wouldn't have been able to use the 60mph contraflow system due to the guidelines and minimum lane requirements/buffer zone. RB8OS provides H1/W4 containment, designed and tested in accordance with EN 1317-2.





