

## Case Study Smooth operator



Photo courtesy of Shutterstock

**Refurbishing a busy junction in the centre of Hastings presented several challenges for Costain, Jacobs and East Sussex Highways. Keen to avoid further intrusive road works, street lighting and traffic signals supervisor Nick Killick was nevertheless aware that the site's topography could create difficulties for above-ground detection. The solution, using AGD's 318 Traffic Control Radar, far exceeded his expectations.**

The junction of Blackman Avenue with Marline Road in Hastings is one of the busiest in the town, and its smooth running is a priority: "We definitely wouldn't want this junction to snarl up," says Nick Killick. The decision to switch from loop-based to above-ground detection was taken as part of a refurbishment and improvement programme that was completed in September 2018.

"We've had a lot of success with the AGD 318 in other locations, and we wanted to try it here – partly because of the already high level of civils works that have taken place on underground services in the area. These tend to create problems with loop detection, and we knew that if we stayed with this method the new loops would only ever be a short-term solution." To make matters worse, speed humps in the road meant loops couldn't be placed precisely where they were needed.

Traffic & Pedestrian Control



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However, the layout of the road presented some obstacles for an above-ground solution. “Historically this hasn’t been a good site for above-ground detection because we couldn’t get a clear view of the approaching traffic,” explains Nick. “There’s a bend leading up to it, but it’s also on the side of a hill, with an approach downhill, an approach uphill and a level approach too. Plus there are lots of trees and bus stops that can get in the sight line of a radar and obscure the view.”

Because of this, Nick and his team wanted a solution that would be discriminatory, to minimise false detections from waving trees, for example. “Telent helped us do some site tests using the AGD 318, which provided an excellent solution – in fact, it has turned what used to be a problematic site into a very efficient site.”

### Difficult problem – excellent solution

“The result has really impressed us,” continues Nick. “The site is also running MOVA and it’s working really well – particularly with the recent enhancements that allow for monitoring of stationary and queuing traffic.”

Reliable and cost-effective, the 318 was developed from enforcement-grade technology, and provides accurate virtual loop detection with speed discrimination, emulating two inductive loops to a range of 150m or lane-specific detection up to 40m.

Because it is pole-mounted, the 318 is very simple to install and maintain, requiring no ducting or intrusive works, and no traffic management or associated disruption to road users. It’s also remarkably quick to set up, thanks to WiFi AGD Touch-setup technology and enhanced user setup GUI, which allow engineers to configure the radar from the safety and comfort of their vehicle. Detection zones can be changed or moved just as easily.

Able to detect vehicle types based on range, speed, direction of travel, the AGD 318 offers flexibility for MOVA schemes, speed discrimination, bus priority and single turning movements. Nick Killick is delighted with its performance: “We were not expecting such reliable detection due to the bus stops and trees near this junction, and the added complication of the junction approaches.”

“In the event, all the problems we’ve experienced with this site have been overcome and the junction is operating far better than it had done previously. I would always consider this solution in similar circumstances, and I’m looking forward to using the AGD 318 to solve future detection challenges.”



The AGD 318 Traffic Control Radar

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