



THE ONE AND ONLY MAGAZINE DEDICATED TO THE HIGHWAY MAINTENANCE AND TRAFFIC MANAGEMENT INDUSTRY

Article as featured in the March 2009 issue of Highways magazine

COLDFIX IS THE ANSWER FOR RINGWAY

When road maintenance specialist Viatec first approached Ringway's Steve Wyatt with its instant cold road repair material, he was more than a little doubtful of its claims. Steve, who manages Wiltshire's road maintenance contract, has seen numerous cold-lay products with boasts of impressive performance fail to live up to expectations.

To convince Steve and his colleague Chris Clarke, Viatec gave an on-the-spot demonstration of the material, Viafix, outside their office at the Devizes road maintenance depot. The demonstration, which fixed a wet pothole, was enough to prompt Steve and Chris to bring Viafix to the attention of their client, Highways Service Manager at Wiltshire County Council, Graeme Hay.

Graeme's interest was immediate as Viafix's efficacy would fit neatly into the Lean Systems intervention he was championing. Under Lean, Graeme proposed a review of all road repair systems and processes (from awareness of defect to completed repair) in order to reduce costs and increase efficiency.

Following demonstrations, training and feedback sessions at each of Wiltshire's Ringway maintenance depots, further trials were carried out. The trials, undertaken in January 2008, covered city and rural locations, wet and cold weather and all results quickly proved Viatec's claims. This rigorous testing was a necessity as products trialed previously in Wiltshire had promised much but always with significant disclaimers. The provisos were numerous; repairs should be carried out with perfect preparation and application, under favourable weather conditions; and, of course, not on heavily trafficked roads. As these situations rarely present themselves on Britain's road network, these materials, in practice, were far from ideal.

Previously, the general means of road repair within the county was undertaken using a 'Roadmender' – a lorry with a hot-box and power tools escorted by a pick-up truck and supporting a team of three men. In addition, smaller teams of Parish Stewards would temporarily fix small defects by hand, which would later be passed to the Roadmenders to make a permanent hot repair.

In accordance with the Lean Systems Intervention Graeme was championing, an assessment was made of the whole cost of repairing a pothole. As Wiltshire is a predominantly rural county, the average distance to each site is 7 or 8 miles; a long way to travel for small repairs with hot equipment. Before Viafix was introduced, the Roadmenders were laying, on average, 1.35 tonnes of hot material per day, this then increased to 3.5 tonnes per day, representing an almost 60% reduction in cost per tonne of hot material laid. This was a direct result of the Roadmender being able to devote their time to larger scale

patching works, whilst leaving the smaller, reactive maintenance fixtures to the Parish Stewards using Viafix. In addition, transport costs were reduced as fewer trips to the larger sites were required. Wastage and consequential cost of tipping / landfill was also dramatically reduced.

Graeme pointed out that recent wet summers had compounded the usual winter maintenance issues and had led to a backlog of problems. This was exacerbated by public perception of what constitutes a pothole and at what point it was the Authority's duty to make a repair. Often, to make an area safe, temporary repairs are required for understandable logistical reasons. However, these reasons aren't often clear to the public who see repeat visits as a waste of public money.

Viafix is instantly ready for use, under any conditions without the need for large kit or vehicles and can be trafficked immediately. These qualities make it an ideal material for smaller 'find and fix' teams like the Parish Stewards and the Incident Support Units of the trunk road network. Using Viafix for a first time repair certainly made a difference to public perception of the efficacy of the work carried out by Parish Stewards. While Viatic were out with the Stewards during trials near Marlborough a rather cynical passerby shouted, "They'll be back next week!" – in fact, a repeat visit has not happened as the repair is still intact.

Parish Steward Dave Hollands went on to explain an instance of a problem defect he'd be dealing with at the bus station in Salisbury. He was fixing this defect yet again, but this time with Viafix, when a passing bus driver commented, "You're wasting your time, mate, we'll soon have that out". Dave was glad to report that the Viafix repair is still fully intact months later despite the heavy and slow moving traffic. He added, "We never have a situation where we can't use Viafix, it's easy to lay in the cold and wet and stays put. It's rewarding to be able to do a good job."



L→R : Wiltshire County Council 'Parish Stewards' Dave Hollands & Jamie Bates with their road maintenance truck and Viafix 'repair kit'

Fellow Parish Steward Jamie Bates described the impact Viafix has made on reaction times and longevity of repairs. He explained, "Previously we would react to reports of defects from the public or the Highway Inspectors within 24 hours by carrying out a temporary repair. This would then be followed with a hot repair by the Roadmender team. However, the hot repair could sometimes take weeks due to the Roadmender's volume of work. This delay often resulted in the temporary repair failing or worsening and meant we needed to go back and make a temporary fix once again. This meant increased cost and risk to both us and the public and more likelihood of accidents and insurance claims against us."

As an example, Jamie was notified of a priority defect on the A338 late one afternoon. A previous temporary repair had failed and as a consequence an insurance claim against the Authority had been made. Before the Stewards could get to the site the next morning, there had been an additional claim. If the Stewards had needed to wait another 48 hours for the Roadmender team to arrive, Jamie was certain that more claims would have resulted. He added, "With Viafix we can act proactively during our 'find and fix' routine and we minimise both potential hazards and resulting claims. We can now fix the defect before it becomes a problem and in many cases, before it has even been reported."

Graeme Hay concurred, "Of course we understand the benefits of early permanent repairs, we simply had no material that was sufficiently durable and easy to apply in all situations which would enable us to act in this way. The Parish Steward idea is about proactive management allowing them to identify and deal with the problems directly, rather than us responding to public requests for action *long after* the event. Early on in the trials we realised we had not returned to any of the 100+ defects that were repaired using Viafix. Other cold materials would have been regarded as temporary and all repairs reissued for hot works. Consequently, the Roadmenders can be released from the small and often remote works and can instead concentrate on larger patching – what they were designed for and best able to do. We no longer have issues regarding access to difficult sites with big, noisy equipment. We have cleared the backlog of dangerous defects quickly, much reducing issues regarding Highways Act sections 41 and 58 and reasons for the public to explore our legal defences."

Wiltshire's own figures for the time elapsed between detection of defect to permanent repair, (i.e. end-to-end, or E2E measurements) clearly illustrate the increase in efficiency afforded by Viafix. In the South of the county, Viafix use started in the beginning of February 2008, after which point the mean E2E measurement fell from 61.2 days to 15.8 days. Additional refinements to the Council's works ordering system further reduced this measurement to 12.3 days. In the North of the county, Viafix was introduced later, in mid June 2008, generating a mean E2E drop from 38.3 to 12.6 days.

Linking in with the Lean analysis, Wiltshire also looked at the environmental profile of Viafix. As a non-hazardous, solvent free material it minimises COSSH implications and health and safety considerations for operatives handling the material. Furthermore, part of the material's binder component is made from renewable resources. This factor, coupled with the reduction in travel to and from hot plants, alongside the minimal waste created by the process, goes a long way to help reduce carbon emissions. In addition, the repair process is a silent operation, so noise pollution is not an issue for residents living close to a potential repair site, further improving public perception.

The recent snowfall in early February 2009 meant that thousands of roads across the West Country region were damaged and a four-fold increase in potholes was experienced in Wiltshire. A BBC news team spoke to Graeme Hay about the problem. In the resulting clip (<http://news.bbc.co.uk/1/hi/england/wiltshire/7886501.stm>) a Parish Steward was filmed using Viafix, whilst Graeme explained how, through this system, the Council could now address pothole problems much more effectively.

Graeme concludes, "To have a cold, high performance material that can easily be used to fix road defects in adverse conditions is truly manna from heaven. The positive developments we have seen with the introduction of Viafix sit well with our Lean systems initiative and enhance the standard of the public service that Wiltshire Highways aims to provide."



An example of Viafix being used for a utilities reinstatement on a class two dual carriageway

For further information on Viafix, it's impressive results and how it could solve problematic pothole repair, road maintenance or utilities reinstatement in your area, please call Viatec on (01761) 409107 or email: info@viatec-uk.com

Viatec UK
Westfield Business Centre
Radstock, Bath BA3 4BH
Tel: 0870 6264184
Fax: 0870 6264186
Info@viatec-uk.com
www.viatec-uk.com