

**Graeme Middleton**, business development manager of car park refurbishment specialist Cemplas, shares his thoughts on the worsening condition of some not-very-old hospital car park structures



# The health of hospital parking

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The perennial problem faced by NHS Trusts offering parking facilities for staff, patients and visitors is that they are land-locked. Often in urban environments, they are unable to spread their footprint in the quest for space to erect new structures, so they adopt the solution of going upwards. This makes absolute sense.

Parking capacity can be increased four or five-fold on a comparatively small area by building a multi-storey structure. With modern design and construction techniques, it's simple enough to erect a 300-space car park with pre-cast segments and a lightweight powder-coated steel frame, clad with some architecturally pleasing metalwork that cunningly disguises it as some futuristic-looking structure of purpose – the purpose being that it becomes a cash generator.

Let's face it, parking is a fantastic revenue stream to any cash-strapped public-sector-funded organisation, so these structures are being erected with increasing frequency. It's great news for the construction industry, and it solves two problems straight away – creating more parking capacity and increasing revenues. But there are worrying signs of trouble ahead.

## Cracking up

With increasing frequency, we are seeing structures that have barely celebrated their 10th birthday – in some cases, not even that – that are already in a very poor condition.

The parking sector has spent the past 15 years or more getting to grips with repairing structures that were in excess of 40 years old, addressing a total lack of maintenance and – let's be frank – complete neglect.

But the new kids on the block are these 'futuristic' parking structures that are only a quarter the age of



their peers, and yet are exhibiting very similar signs of distress: cracks in the asphalt deck surfaces that allow water to seep – sometimes pour – through onto cars below, damaging their paintwork and creating an unpleasant environment for patrons; waterproof decking systems that are so poorly applied or maintained that in many cases they can be peeled up with your fingers; movement joints that have failed so dramatically that they leave gaps through which you can wave to the people on the deck below; and even structural steel paintwork with more rust on it than Spaghetti Junction.

### The right treatment

I hate to sound repetitive, but what about planned – even routine – maintenance? Would you have a new carpet fitted in your living room and not vacuum it for 10 years? At Cemplas, we know several instances where the owner of one of these new car parks – for a variety of reasons – didn't carry out any planned maintenance in accordance with the Operators and Maintenance manuals given to them by the original constructor. So, when they've registered their displeasure at the failures that have occurred, because the structure has not had any level of TLC, its guarantors simply shrug their shoulders and walk away.

Have we learned nothing? All the information is out there: the BPA Structures and Asset Management Group (SAMSIG); Lifecare Plans; ICE *Recommendations for the Inspection, Maintenance and Management of Car Park Structures*. The irony is that with the apparent lack of routine inspection, combined with little or no evidence of planned maintenance, the healthcare sector is giving itself a serious headache that is only going to get worse.

## Hospital case study: USL StructureCare and the Brunel building

The new car park is part of the extension to the Brunel building at Southmead Hospital Bristol, which was handed over to North Bristol NHS Trust by developers Carillion. The car park, which is located within the Brunel building extension, has more than 600 spaces for patients and visitors on site.

USL StructureCare got involved with the project after the Zootjens Pardak paving system was selected, as the firm is Zootjens' chosen waterproofing partner. Over the six years of their partnership, the two firms have installed waterproofing and paving solutions to more than 15,000m<sup>2</sup> of parking area throughout London, Birmingham, the North East and Scotland.

With key medical facilities below the first floor level of the Brunel building, where the parking deck was to be installed, a combination of Blueshield PmB waterproofing by Pitchmastic PmB and Zootjens was chosen to give essential structural waterproofing, insulated and then protected by the trafficable Pardak parking system.

The Blueshield PmB system came with a single point responsibility guarantee. Five USL staff were involved in the installation of the system, which took two weeks, including all surface preparation work. No issues were encountered, so everything took place on time and on budget.

'Blueshield PmB is a spray-applied, fully bonded system, with class-leading adhesion and crack-bridging capability. Its rapid cure of less than 10 seconds allows paving works to start almost immediately. The product is both manufactured and installed by USL Group, providing a single point of responsibility for both the product and installation,' said Mark Blackburn, divisional manager at USL.

This is one of a number of successful projects completed by USL StructureCare and Zootjens

North Bristol NHS Trust project manager Martin Warren said: 'We are pleased to have opened our new car park to patients and visitors and hope it will improve their experience when coming to the hospital.'