SPOTLIGHT ON

WOLVERHAMPTON CIVIC CENTRE MSCP

REFURBISHMENT OF ACCOMMODATION BLOCKS

As part of an £18m refurbishment of Wolverhampton Civic Centre, VolkerLaser delivered an innovative repair and cathodic protection system techniques to the Centre's multi-storey car park.

In 2016, renovations were made to the Wolverhampton Civic Centre. The £18m project resulted in an increased capacity of up to 5,000 people and upgraded access for disabled visitors. The improvements to facilities were introduced to attract more visitors from Wolverhampton city centre and the surrounding areas. At the time of the works, the Civic Centre car park was 40 years old and had the capacity to fit up to 400 vehicles. However, the underground structure had been plagued with reinforced concrete defects and had undergone numerous repair contracts since being built.

Working in phases, VolkerLaser utilised a full portfolio of services to complete the refurbishment, including concrete repairs to soffits and walls, and 12,500m² of Stirling Lloyd Decseal deck waterproofing. Anti-carbonation coatings and colour bands were also applied to columns to add aesthetic value. Most impressively, VolkerLaser pioneered the design and installation of an impressed current cathodic protection system known as Zebra. Although the system has had extensive use in the severe climatic conditions of Scandinavia and Northern Europe, this was the first time the innovative permanent protection method was used in the UK.

The Zebra system is a result of improvements on conventional anode systems, comprising titanium ribbons and meshes, which are often weak in the areas of embedding and bonding mortar. The integrated power distribution ribbon distributes current evenly in the conductive Zebra coating, which is applied in the system's signature black and white stripes, providing aesthetic benefit. VolkerLaser undertook extensive trials to ensure compatibility of the system, before overcoating with Stirling Lloyd Decseal. VolkerLaser's development of the design of this remedial solution has been significant, having been involved with the scheme for approximately three years.

£1.9 M
CONTRACT VALUE

26 WEEKS
PROJECT DURATION

400
VEHICLE SPACES

12,500M²
STERLING LLOYD DECSEAL

VolkerLaser overcame environmental challenges during the project with quick thinking. The region experienced a heavy downpour of rain during the works, which caused excessive flooding to the basement level of the car park, meaning that it couldn't be accessed due to the damage. VolkerLaser reached a solution by pumping the excess rainwater away and re-treating the car park effectively. Another challenge the VolkerLaser team had to overcome was to minimise noise pollution generated by the works. The team overcame the challenge by installing temporary roofs over the site, as well as ventilation ducts surrounding the car park.

The 26-week project was completed in September 2016, allowing ample parking for visitors to the city, prior to the busy period where graduation ceremonies were held at the local university. VolkerLaser gave the once tired car park a new lease of life, as well as developing walkways for pedestrians, extra disabled parking, motorcycle areas and bicycle spots.

ⓘ THE NEWLY REFURBISHED WOLVERHAMPTON CIVIC CENTRE MULTI-STOREY CAR PARK.