

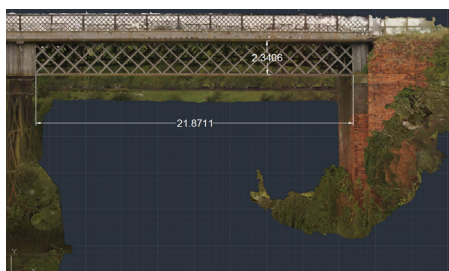
Bennerley Viaduct is one of only two remaining wrought iron viaducts in England. Bennerley Viaduct is a Grade II listed structure dating from 1877 and spans the Erewash Valley between Derbyshire and Nottinghamshire. The viaduct deck is approximately 18m above the River Erewash.

Bridgeway Aerial* was commissioned by Atkins to develop an innovative approach to inspect the viaduct while minimising site time and cost, with the ultimate goal being to convert parts of the viaduct and surrounding area into a cycle path.

We devised a system to enable the creation of a highly accurate merged pointcloud derived from both terrestrial scanning and photogrammetry collected by UAV.

Bridgeway survey teams initially set out a survey control grid and undertook static laser scans using Leica P30 scanners. This data was then supplemented by photo and video collected by UAV with the full Civil Aviation Authority permissions in place.

Once collected, the surveys were processed and a full 3D pointcloud created. From that, Bridgeway Geomatics Team extracted general arrangement drawings, plans and sections which enabled our client to fully assess the structure and identify key areas of interest. A roped access tactile inspection was then undertaken on key areas in order to compile a full technical report.



t: 0115 919 1111

t: 01865 309 636

enquiries@bridgeway-aerial.co.uk

www.bridgeway-aerial.co.uk