Updated: September 2015



Bull Ring Farm Road Overbridge Parapet Wall Coping



Overview

Replacing masonry coping stones with a new FRP version following the strengthening and raising of parapet walls.

Details

Location	Harbury, Warwickshire, UK
Description	Replacement of an existing masonry coping stone with a new FRP coping following strengthening and raising the parapet walls on a 75m long farm accommodation bridge over the railway.
Client	Network Rail
Date of project	October 2015
Where FRP composites are used and why	FRP was used mainly due to its light weight, low maintenance and ease of installation. A concrete coping was initially specified for this scheme but following a meeting with NR Route Asset Manager to discuss a new FRP coping idea that was being developed, he suggested this site as suitable trial location for the new concept.
Specific design details	The Overbridge is 75m long with a parapet each side. Two Hundred FRP Coping units 390mm wide x 255mm high were fabricated in 750mm lengths with a weight of 15kg, compared to PCC copings that weigh 80kg. Samples were prepared for client approval and have received wide acclaim and positive feedback. Discussions are ongoing with a number of interested stakeholders about other projects and uses for the concept.
Type of composite used	The coping was fabricated by vacuum resin infusion using polyester resin with 3D structural foam core and glass fibre reinforcement.
Performance in service	To be reported. Copings are being installed in October 2015.
Project partners	Principal Contractor - J Murphy and Sons Limited FRP Designer and Fabricator - Construction Composites Limited