

CASE STUDY



D400 Narrow Profile Captive Hinged Grating

SAFE, SECURE, VERSATILE



In collaboration with Wirral Council and Rhino Asphalt Solutions Ltd



The issues faced

The A41 New Chester Road is a busy route in Birkenhead where increasing traffic intensity is leading to more frequent failure of ironwork, higher than budgeted costs and disruption to road users. In congested areas it is also common for cyclists to swerve and avoid the surface water drainage system bringing them into close proximity with traffic leading to an increased risk of accidents.





Findings

In areas where the road narrows this brings heavy vehicles into contact with the leading edge of a grating. This localises the stress transmitted into the ironwork which leads to a breakdown of the installation material and if left, the eventual failure of the ironwork and reinstatement.





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The Solution:

PROTEUS D400 NARROW PROFILE HINGED GULLY GRATING

Initially developed in conjunction with Highways England and Rhino Asphalt Solutions Ltd for use in the strategic road network, Wirral Council recognised the advantages of Proteus when selecting it as their preferred solution.

Proteus represents an innovative approach to product design. Its narrow grating profile avoids excessive clipping by traffic, its patented angled bridge is designed to distribute stress and resist displacement enhancing its stability, increasing its durability. At less than 300 mm wide its grating profile is safer for cyclists who are sometimes put at risk when swerving to avoid ironwork in the road.



Proteus can be used in a wide variety of applications such as roads that have continuous heavy traffic. It has an independently verified **BS EN124 2015** load classification of D400 to withstand vehicle loads of up to 40 tonnes.

The Value

When combined with the Rhino Asphalt Solutions Ltd Ironmaster Installation System and its compatibility with the existing drainage network, Proteus provides a solution that improves cyclist safety and offers long term performance reducing whole life costs for Wirral Council.

Over the years we have experienced a number of gully failures. We have noticed that this is largely due to HGV traffic running over the front edge of each piece of ironwork. With Rhino's and Saint-Gobain PAM's new Proteus Gully protruding significantly less into the carriageway than a standard gully (but also collecting the same amount of surface water), we are confident in less future failures, and have the reassurance of a 5 year guarantee.

Phil Miner Wirral Council

Proteus is just one of several innovative solutions offered by Saint-Gobain PAM UK. For further information and advice on Proteus or any other product or service offered by Saint-Gobain PAM UK please contact our team on