

# M4 widening

<b>Client</b>	McAlpine Construction
<b>Contractor</b>	PDS PLC
<b>Consultant</b>	Scott Wilson
<b>Area</b>	500 metres

### In brief

Polytech provided technical advice to PDS PLC, replacing the original specification for the M4 widening, which was a channel and grate product, with Poly-Traffic – a more robust one-piece linear drainage system that is designed for use in carriageway applications.

### Project scope

As part of the M4 widening, that is being extended to a dual three lane standard, PDS PLC was contracted to manage the channel drainage requirements at Junction 39/32, Pentwyn, Cardiff.

When PDS PLC approached Polytech to procure the specified channel and bolted grate, Polytech's technical team was able to draw on previous carriageway drainage experience and advised that two-piece products are often changed for a monolithic channel part way through installation. This is because any channel that has a fixing joint between the channel and grate, has the potential to work loose under dynamic loads.

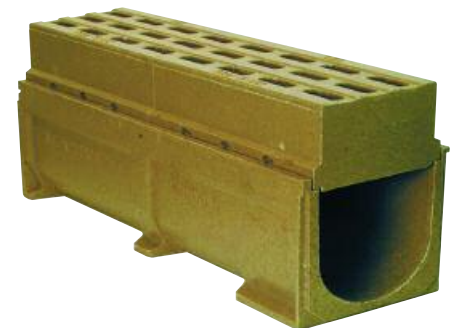
Evaluating the specific project requirements, Polytech recommended the use of a combination of systems from the Poly-Traffic range. Poly-Traffic is a monolithic concrete linear channel that increases the efficiency of on-site installation and offers superior drainage performance in terms of evacuation and durability.

While the original specification was wet-cast concrete, which would not provide effective salt and frost resistance, Poly-Traffic is polymer concrete – offering complete protection from these corrosive substances.

By using Poly-Traffic, PDS PLC stayed well within project budget and kept to the site programme, with reduced risk of replacement costs that could have easily been incurred if the original specification had been installed.



As a one-piece channel drainage system, Poly-Traffic delivered a robust and cost effective solution for the M4 widening project.



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