

KALGOORLIE SEWER TRUNK MAIN

DELIVERING STRENGTH BENEATH THE SURFACE: EMPIRE INFRASTRUCTURE POWERS THE KALGOORLIE SEWER UPGRADE

As Kalgoorlie expands, the city requires robust infrastructure to support its developing residential and industrial areas. One of the most significant upgrades is the construction of a new sewer trunk main and extension, a project delivered by Rob Carr Pty Ltd on behalf of Water Corporation WA. Empire Infrastructure played a critical role, supplying the high-performance BOSSPIPE CC-GRP SN1,000,000 jacking pipe required to navigate the project's demanding geological and logistical challenges.

SUPPLYING THE RIGHT PIPE FOR TOUGH CONDITIONS

Empire Infrastructure provided 379 metres of DN375 (OD427) CC-GRP jacking pipe. This material was chosen specifically because Kalgoorlie's subsurface presents an unpredictable mix of rock and clay, requiring a pipe that could handle significant ground variations and extreme thrust loads.

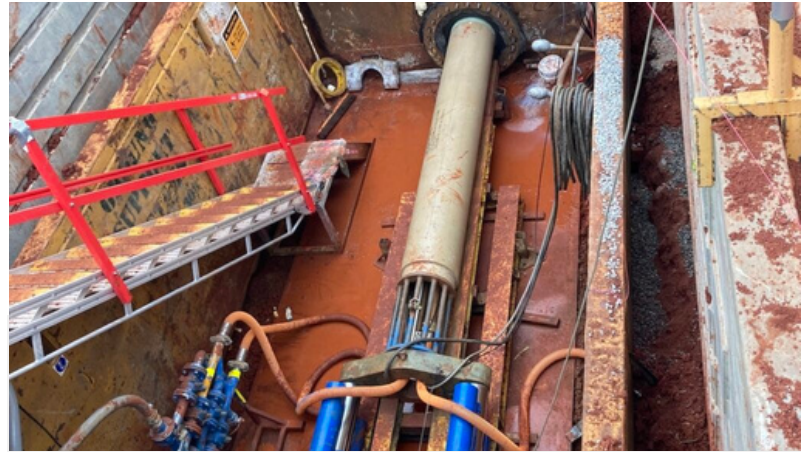
"Kalgoorlie needed a pipe that could handle the unknowns underground, and CC-GRP was the right fit," said Aaron Mackley, Director of Sales & Operations at Empire Infrastructure.

The pipe's exceptional stiffness and compressive strength ensured reliable performance for long-distance, slurry pressure-balanced microtunnelling drives up to 150 metres. Lighter than concrete and corrosion-resistant, CC-GRP minimises handling challenges while maximising structural performance under stress.

SEAMLESS TRENCHLESS INSTALLATION

The CC-GRP pipe was central to the 379 metres of DN375 microtunnelled sections, installed using Rob Carr's Tunnel Boring Machines. Microtunnelling was critical for crossing beneath rail, road, and airport-adjacent assets with precision, minimising surface disruption.

Empire Infrastructure ensured all pipe specifications aligned with the changing geological strata.



PROJECT DETAILS

Location: Kalgoorlie, WA

Contractor: Rob Carr Pty Ltd

Product Supplied: BOSSPIPE CC-GRP

Scope: 379m of OD427 Jacking Pipe

Stiffness: SN1,000,000

Installation: Microtunnelling Slurry-based TBM


The pipe's ability to accommodate high thrust loads and abrasive ground made the entire tunnelling program seamless, with all drives completed successfully and no material-related delays.

Set for completion in February 2026, the Kalgoorlie Sewer Main upgrade will provide long-term wastewater resilience, showcasing Empire Infrastructure's commitment to high-performance, durable materials for Australia's most complex trenchless projects.

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