CASE STUDY

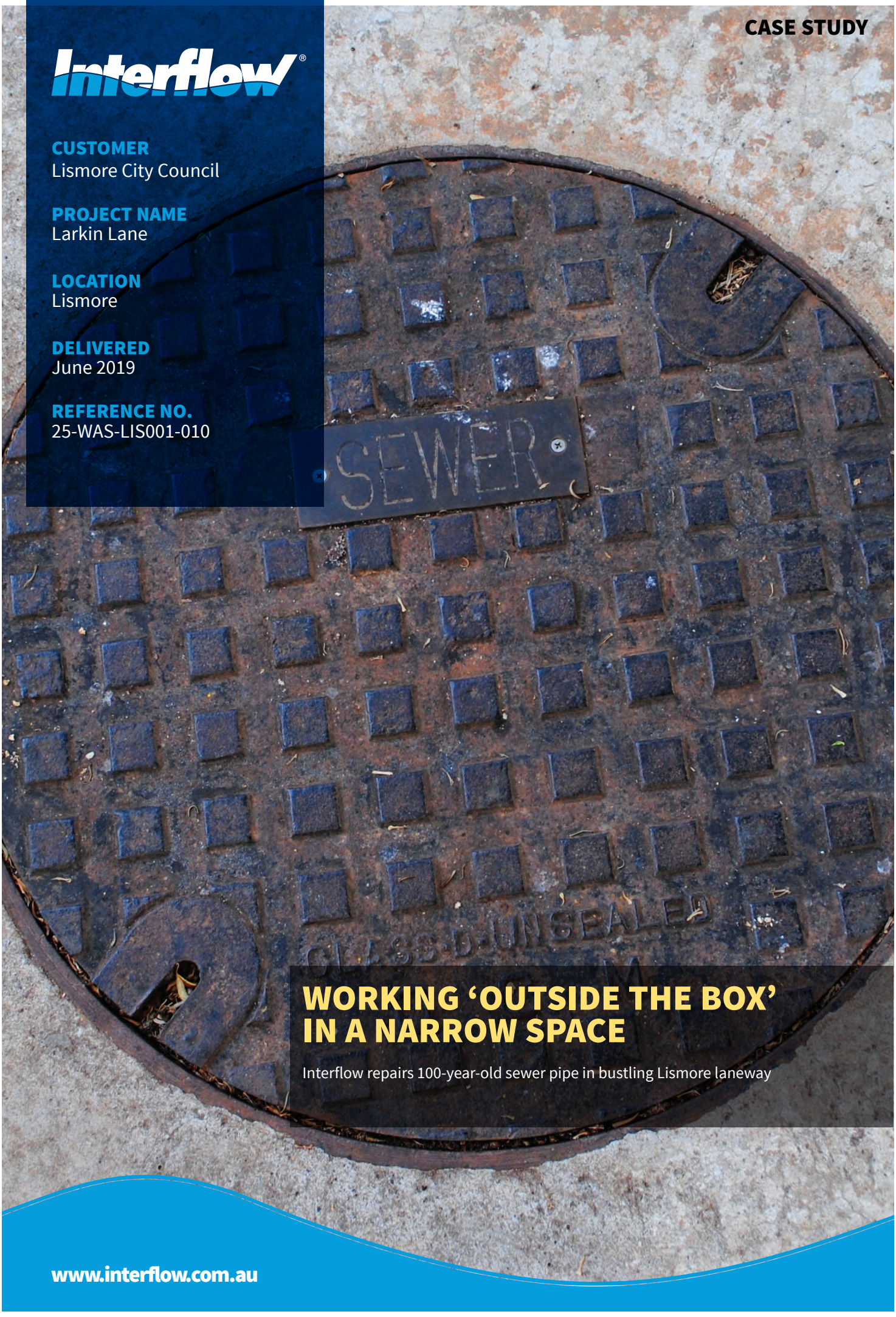
CUSTOMER
Lismore City Council

PROJECT NAME
Larkin Lane

LOCATION
Lismore

DELIVERED
June 2019

REFERENCE NO.
25-WAS-LIS001-010



WORKING 'OUTSIDE THE BOX' IN A NARROW SPACE

Interflow repairs 100-year-old sewer pipe in bustling Lismore laneway

www.interflow.com.au

THE CHALLENGE:

In 2019, the 100-year-old sewer line under Larkin Lane in Lismore collapsed. Nine broken junctions, which were buried five metres below the ground, required a complete dig and repair before the sewer could be relined. The 5.5m laneway is flanked by buildings in the 'zone of influence', which meant their weight would directly impact the walls of the trench.

The pipeline had high flow in the main and house service lines, which made excavation especially challenging, and conditions were extremely muddy. It was also necessary to minimise disruption to local businesses and tourists.

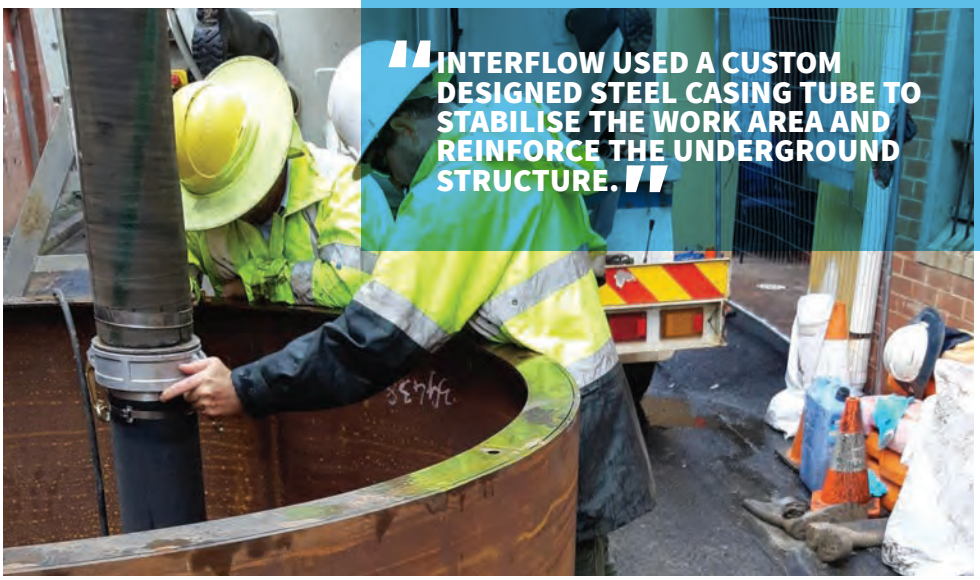
THE SOLUTION:

After preparing a geographical report of the area to develop the methodology, Interflow installed a custom-designed steel casing tube to stabilise the area and reinforce the underground structure. This provided security to the outer maintenance holes and eliminated potential disruption to the trench caused by the surrounding buildings.

Due to the confined space, a large excavator could not be used, so Interflow used a smaller six-tonne excavator to lift each section of the tube and bolt them together.

Interflow consulted extensively with key community stakeholders and ensured local businesses were able to operate as usual, with minimum disruption.

Steel casing tube being bolted together



> "INTERFLOW USED A CUSTOM DESIGNED STEEL CASING TUBE TO STABILISE THE WORK AREA AND REINFORCE THE UNDERGROUND STRUCTURE."

THE PROJECT:

Located in the heart of Lismore, Larkin Lane is adorned with street art and home to hip cafes. Five metres beneath the narrow laneway is a 100-year-old sewer line, which collapsed in 2019.

Replacing the collapsed sewer was challenging, due to its five-metre depth, the proximity of nearby, multi-level buildings, the muddy conditions and the need to conduct repairs with minimal disruption to local businesses and visitors to the area.

Interflow used a custom-designed steel casing tube to stablise the work area and reinforced the underground structure. Its 'hoop strength' was strong enough to resist the ground pressure from the soil and withstand any weight imposed on the trench.

By maintaining a small, contained project footprint, Interflow ensured that local businesses were able to operate as usual and that access to the walkway remained open.

CONCLUSION:

Interflow used methods that have not previously been used to overcome challenges associated with this project to successfully repair the critical wastewater asset in a timely manner. This ensured that Larkin Lane – one of Lismore's most popular tourist attractions – remained open during the project and the disruption to local businesses was minimised. Safety management was also key to the project to ensure the work site was safe for crew and the community.

Interflow is committed to offering customers optimum solutions of the highest value for infrastructure within the water sector.

To find out more about Interflow's full suite of water network solutions, scan the QR Code or visit: www.interflow.com.au.