

#### **PROJECT CASE STUDY**

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## RIVERSTONE CENTRAL AXIS MAINTENANCE SHAFT INSTALLATION (CAMS)

### **Solution highlights**

Almost 300 meters of DN150 sewer pipe was installed at grades as shallow as 0.80%. Even though this installation was designed at a depth of over three meters, our Central Axis Maintenance Shaft (CAMS) proved to be an invaluable asset to the constructor.

The CAMS have been appraised by the Water Services Association of Australia (WSAA) to WSA137, which is industry standard for maintenance shafts and sewage chambers.

The product is rapidly gaining momentum in Australia, with seven CAMS being installed to one manhole in this wastewater application alone. Its unique advantages are recognised by Sydney Water Corporation designers, Water Service Co-ordinators (WSC's) and constructors alike.

Project	Riverstone Central Axis Maintenance Shaft Installation
Who	Sydney Water
Where	Riverstone, Sydney Australia
When	2017
Scope	Manufacture, supply and delivery of a Central Axis Maintenance Shaft solution.

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They [the Central Axis Maintenance Shafts] were fantastic to install. They were faster to lay and were perfectly aligned in the trench due to the accuracy of CNC manufacturing. Project Contractor

#### Summary

We supplied an innovative project solution to the Riverstone community through the design and delivery of our unique Central Axis Maintenance Shaft.



The project involved the delivery of multiple Central Axis Maintenance Shafts (CAMS) for Sydney Water to Riverstone, NSW. These CAMS play a critical role in the conveyance of waste water from the new homes of 35+ families moving into the area.

The flexible design features of the Central Axis Maintenance Shaft mean that each unit is bespoke—CAMS are manufactured to specific project and application needs. Clover supplied this project within three working days of order placement, with manufacture made entirely to the Riverstone project's specifications. CAMS are easier to install when compared to the complex concrete formwork required when installing manholes. Where a manhole may take 1-2 weeks, a Maintenance Shaft can be installed in minutes. There is no requirement of waiting for concrete to dry, and each one can be installed consecutively—reducing cost of labour and man hours.

Its PVC construction is lightweight, robust and strong. This allows for easier handing by installers, and lower weight when shipping. The compact size of the product means that its small footprint requires less excavation and reduced spoil.

## Need help with your next project?

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