

ROAD AND DRAINAGE WORKS AT QUAKERS HILL AND RIVERSTONE WATER TREATMENT PLANTS

CLIENT: SYDNEY WATER

LOCATION: RIVERSTONE & QUAKERS HILL

DURATION: 4 MONTHS

VALUE OF ENGAGEMENT: \$4M

Ferrycarrig was engaged by Sydney Water to carry out road construction and drainage works at the newly upgraded Quakers Hill and Riverstone Water Treatment Plants.

The Lower South Creek Treatment Program covers upgrades to wastewater treatment facilities at Riverstone Wastewater Treatment Plant, St Marys Water Recycling Plant, and Quakers Hill Water Recycling Plant.

Sydney Water identified the need to deliver significant improvements to the water quality, treatment plant capacity, and reliability of the wastewater system in the Lower South Creek region.

Ferrycarrig has been engaged by Sydney Water to complete roads and drainage construction works package at the newly upgraded treatment water treatment plants at Quakers Hill and Riverstone. This includes installation of stormwater, preparing areas for new roads, and various aspects of concrete works around the treatment plants.

Due to the potential environmental impacts of contaminated rain runoff into adjacent waterways, the stormwater network was upgraded to increase its capacity and for recycling back into the sewer network. This was achieved by first upgrading the network with additional stormwater lines and pits and further upsizing existing pipes and lintels.

A first flush system was installed at the lowest part of the network before being released into the adjacent waterways. The purpose of this tank was to capture any contaminants and subsequently redirect the flow into the adjacent sewer network so the water could be treated by the plant.

With the construction of new treatment elements, the footprint of each plant doubled in its size. To access the new structures for operations and maintenance, Ferrycarrig constructed new flexible road pavements throughout the plant. This included the detailed excavation and pavement construction including kerbing and asphalt pavement elements.

All works had to be coordinated with the Sydney Water plants to ensure full operations could be maintained during the construction phase. To mitigate impacts to operations, Ferrycarrig worked closely with the Sydney water team to ensure daily traffic movements were well-coordinated between all parties' deliveries.

Special consideration was given to the Sydney Water chemical deliveries where temporary pavements had to be constructed and removed regularly to ensure operations and access to designated points.

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