

PIPE JACKING CASE STUDY

Arklow Wastewater Treatment Plant



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PROJECT	Arklow Wastewater Treatment Plant
CLIENT	Uisce Éireann
CONTRACTOR	Ward & Burke
PIPE SUPPLIER	Tracey Concrete
TUNNELLING MACHINE	Herrenknecht AVN
VALUE	€79million



PROJECT OVERVIEW

The project is based on the southside and northside of the Avoca River, in Arklow town, County Wicklow. The project entails the demolition of the disused wallboard factory and the construction of a wastewater facility, with all attendant buildings, utilities, and the outfall for treated water to sea. The interceptor sewers run along the north and south quays of the Avoca River including a section crossing under the river.

The works are in a built-up area, requiring a significant interface with utility providers and stakeholders, as well as the general public. There are currently no wastewater treatment facilities in Arklow town. As a result, untreated wastewater is being discharged directly into the Avoca River. The current works will rectify this problem and facilitate future development in the town, which is currently constrained by the lack of adequate wastewater treatment.

DESCRIPTION OF WORKS

Tunnelling commenced in March 2022 using a specialised tunnel boring machine, this method is complex but necessary to mitigate disruption to traffic congestion, residents etc.

The works included:

- Installation of approximately 670m of Ø1200mm sewer by micro tunnelling on the north quay of the Avoca River.
- Installation of approximately 600m of Ø1500mm sewer by micro tunnelling on the north and south quay, including a complex 210m tunnel drive crossing beneath the Avoca River.
- Construction of 10Nr reinforced concrete tunnel shafts up to 7m internal diameter and up to 14m deep.

All tunnelling equipment mobilised to W&B from locations across Ireland and the UK. All design resources and temporary works systems were in-house.

FURTHER INFORMATION: www.wardandburke.com

