

MORNINGSIDE PIPE BURST

OIL/GAS | SEWER | STORMWATER | POWER | WATER | TELCO

LOCATION	East Brisbane QLD	
CLIENT	Comdain Infrastructure/ Queensland Urban Utilities	
PIPE	355 mm PE	
LENGTH	266 metres	
GEOLOGY	Moist clay	
TECHNIQUE	Pipe bursting	

PROJECT OVERVIEW

Pipe bursting is a trenchless technique that replaces existing underground pipes without having to excavate traditional open cut trenches as a means of replacement. The scope of this East Brisbane pipe bursting project required the replacement of an existing 300mm cast iron water main pipe with 355mm PE. The job was divided into three runs of 96, 65 and 105 metres.

WORKS AND CHALLENGES

In preparation, the existing pipe was inspected using CCTV to identify any potential problems and obstructions. Stop valves, hydrants and utilities running across or parallel to the mains were located to help determine where to safely excavate and install launch holes for the pipe bursting project. The existing pipe was located in close proximity to the concrete power transmission poles, which created a risk of these poles cracking during the pipe bursting works. By identifying this risk in the early planning stages, potential damage and public safety problems were averted by collaborating with the energy provider.

Another issue was traffic control - as a high-volume vehicle and pedestrian area, including local schools in close proximity, full-time traffic management was required. The benefit of trenchless pipe bursting is that a work site can be isolated to a 10 metre section, even when more than 100 metres of pipe is being replaced.

RESULTS

The project was completed on time, within the proposed four day schedule. Working closely with the client, UEA met all key project objectives, including:

- Installing as much pipe as possible with minimal restoration; a total of 266 metres with only 25 lineal metres of footpath requiring repair predominantly around the machine and launch pits
- Minimal impact on vehicle and pedestrian traffic by using small, isolated work zones managed by traffic controllers
- Retaining all 24 trees along the affected area with no environmental damage.