



FOUL SEWER AT BALLYGOMARTIN ROAD, BELFAST

Construction of a Foul Sewer by Trenchless Technology

Client: Northern Ireland Water

SUMMARY:

Status:

Completed in 2010

Services Provided:

Procurement:

NIW Framework for
Small Sewerage Schemes
(Select list of 3 contractors)

Optioneering / Detailed Design,
Preparation of Contract Documents,
Assessing Tender Submissions,
Construction Management

Nicholas O'Dwyer Ltd. were appointed by Northern Ireland Water as Consultants for the design, procurement and project management of the foul sewer extension to serve a new development on the Ballygomartin Road, Belfast. The project involved constructing 180 metres of 250mm diameter uPVC sewer and 27 metres of 225mm diameter clayware sewer.

The works had a number of difficult service crossings, plus crossing under a 4 metre high boundary wall. To minimize disruption 27 metres of sewer was constructed using trenchless technology namely auger boring. Before auger boring could be incorporated in the works detailed site investigation had to be carried out. This involved a number of boreholes to determine the ground make up and trial holes at the boundary wall to obtain the depth of foundation. The investigation work proved that this method for pipelaying could be used.

A number of risks were mitigated due to the use auger boring, this meant that the contractor was not required to excavate around three critical crossings which involved undermining the boundary wall, crossing under a 600mm diameter ductile iron trunk watermain and 225mm diameter storm sewer.



Nicholas O'Dwyer
CONSULTING ENGINEERS