

ENGINEERING THAT WORKS FOR YOU

Main Drainage- Longbenton Flood Alleviation Scheme

Contract	Value	Location
32 Weeks	£3,300,00	Longbenton

Client

Northumbrian Water Ltd

Abbey Road

Pity Me

Durham

DH1 5JF

Engineer:

Montgomery Watson Harza

Melbourne House
Melbourne Street
Newcastle Upon Tyne
NE1 2JQ



Project Description:

The scheme was designed by NWL to reduce the flooding to 80 properties in the Longbenton / Forest Hall area which were subject to sewer flooding.

The scheme required extensive modification to the sewer network, including:

- Extensive excavations in front of schools, houses, shops and local businesses.
- Construction of a holding tank opposite a housing estate to store storm water for controlled release back into the sewerage system.
- 1.9km of 300 – 1,800mm sewer construction
- Holding tank construction - 105m x 50m x 3m

Key Challenges

- Sequencing of works with regards to road closures, connections and tank completion
- Management of large volumes of spoil from tank and sewer construction in a limited working area.
- Maintaining Access for local residents and businesses
- Working closely with residents and businesses to minimise disruption.

Community Relations

Excellent community relations were maintained with the local community throughout the project through constant communication via:-

Meetings

Daily communications with residents

Letter drops

E-mails

Dedicated website

Innovation

Seymour's proposed the use of pre-cast Carlow internal supports in lieu of cast in-situ, the benefits of which included:-

Reduced Construction Time

Reduction in raw materials

Reduced local disruption

Safer Working Practices

Environmental Sustainability

Material from the drainage excavations was recycled and used as backfill for the holding tank construction.

5,000m³ of material was removed from a demolished local school. This was recycled and used as Type 1 backfill material for the drainage excavation, saving on time and for material transport.

